# College of Engineering

## Wichita State University

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|---|---|
| Johnson County Community College Transfer Program to the Wichita State University | WSU College of Engineering |
| College of Engineering | 316-978-3400 |
| College of Engineering | www.wichita.edu/academics/engineering/essc/advising/ |
| Academic Year 2025-2026 | www.wichita.edu/engineering |

### Program Description

The Associate of Arts, AA (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 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.

### 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 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 (https://www.wichita.edu/admissions/undergraduate/transfertowsu/).

## WSU General Education Requirement:

• Students transferring to WSU, that complete the General Education requirements required for the Associate of Arts (AA) (https://catalog.jccc.edu/degreerequirements/associate-arts/), Associate of Fine Arts (AFA) (https://catalog.jccc.edu/degreerequirements/associate-fine-arts/) or Associate of Science (AS) (https://catalog.jccc.edu/degreerequirements/associate-science/) degree from JCCC will be considered to have satisfied WSU's core general education curriculum.
• Students who transfer to WSU, without completing the General Education requirements required for the Associate of Arts (AA) (https://catalog.jccc.edu/degreerequirements/associate-arts/), Associate of Fine Arts (AFA) (https://catalog.jccc.edu/degreerequirements/associate-fine-arts/) or Associate of Science (AS) (https://catalog.jccc.edu/degreerequirements/associate-science/) degree will have courses evaluated on a course-by-course basis toward meeting WSU requirements. To learn more about courses that satisfy WSU Core Requirements (https://catalog.wichita.edu/undergraduate/academic-information/general-education-program/) and WSU Transfer Equivalency Tool (https://www.wichita.edu/admissions/undergraduate/transfertowsu/).
• (https://www.jccc.edu/student-resources/transfer/files/transfer-guides/wsu-gen-ed-requirements.pdf)WSU Core General Education Guide (https://nam12.safelinks.protection.outlook.com/?url=http%3A%2F%2Fnextcatalog.jccc.edu%2Ftransfer-guides%2Fwsu%2Fwsu-general-education%2F&data=05%7C02%7Cskhalif2%40jccc.edu%7C3bbbe8fc84564328cf7008de1320415e%7C15244239dcf245e7aefd127b69fc5438%7C1%7C0%7C638969226426443556%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMiIsIkFOIjoiTWFpbCIsIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=1kY96CCwI0dnooAhici9xndoe5HA4iO8u%2BSLmogJtWM%3D&reserved=0)
• WSU requires Specific General Education Requirements (https://www.wichita.edu/academics/generaleducation/) by College. 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 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. 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.
• Dual Advising: **(**https://slate.wichita.edu/register/dualadvising/**)** WSU strongly suggests that potential transfer students involve their WSU advisor in program planning.
• Graduation Requirements: **(**https://catalog.wichita.edu/undergraduate/academic-information/graduation/**)** 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 Requirements:

## MATH & NATURAL SCIENCES – Required for all College of Engineering majors.

| Course Code | Course Title | Course Hours | Transfer Code | Transfer Title | Transfer Hours |
|---|---|---|---|---|---|
| **Code** | **Title** | **Hours** | | | |
| CHEM 124 | General Chemistry I Lecture* (AND/Lab *# ) L | 4 | CHEM 211 | General Chemistry I | 5 |
| CHEM 125 | General Chemistry I Lab* (except APEN-PA concentration, CB CE, CS) | 1 | CHEM 211 | General Chemistry I | 5 |
| MATH 201 | Statistics* (except AE, ME) | 3 | IME 254 | Engineering Probabilty Stats | 3 |

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|---|---|---|---|---|---|
| MATH 241 | Calculus I* (except CB) | 5 | MATH 242 & MATH 242H | Calculus I and Calculus I Honors | 5 |
| MATH 242 | Calculus II* (except CB) | 5 | MATH 243 & MATH 243H | Calculus II and Calculus II Honors | 3 |
| MATH 243 | Calculus III* (only AE, EE, ME) | 5 | MATH 344 | Calculus III | 3 |
| MATH 254 | Differential Equations* (except APEN, CB, CS, IE) | 4 | MATH 555 | Differential Equations I | 3 |
| PHYS 220 | Engineering Physics I* (except CB) L | 5 | PHYS 313 | Physics for Scientists I | 4 |
| PHYS 221 | Engineering Physics II* (except APEN-SE concentration, CB) #L | 5 | PHYS 314 | Physics for Scientists II | 4 |

* JCCC course has a prerequisite or corequisite.

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

## Aerospace Engineering - AE

| Course Code | Course Title | Course Hours | Transfer Code | Transfer Title | Transfer Hours |
|---|---|---|---|---|---|
| **Code** | **Title** | **Hours** | | | |
| ECON 230 | Principles of Macroeconomics +^ | 3 | ECON 201 & ECON 201H | Introduction to Macroeconomics and Prin of Macroeconomics Honors | 3 |
| ENGR 131 | Engineering Graphics I:AutoCAD* | 4 | IME 222 | Engineering Graphics | 3 |
| ENGR 251 | Statics* | 3 | AE 223 | Statics | 3 |
| ENGR 254 | Dynamics* | 3 | AE 373 | Dynamics | 3 |
| PHYS 220 | Engineering Physics I* +^L | 5 | PHYS 313 | Physics for Scientists I | 4 |

## Applied Engineering – APEN

| Course Code | Course Title | Course Hours | Transfer Code | Transfer Title | Transfer Hours |
|---|---|---|---|---|---|
| **Code** | **Title** | **Hours** | | | |
| ACCT 121 | Accounting I (AND) | 3 | ACCT 210 | Financial Accounting | 3 |
| ACCT 122 | Accounting II* (EM concentration only) | 3 | ACCT 210 | Financial Accounting | 3 |
| ECON 230 | Principles of Macroeconomics +^ | 3 | ECON 201 & ECON 201H | Introduction to Macroeconomics and Prin of Macroeconomics Honors | 3 |
| ENGR 131 | Engineering Graphics I:AutoCAD* | 4 | IME 222 | Engineering Graphics | 3 |
| ENGR 251 | Statics* | 3 | AE 223 | Statics | 3 |
| EVRN 130 | Environmental Science (AND) | 3 | BIOL 370 | Intro Environmental Science | 3 |
| EVRN 132 | Environmental Science Laboratory* L | 2 | BIOL 371 | General Microbiology | 3 |

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|---|---|---|---|---|---|
| PHYS 220 | Engineering Physics I* +^L | 5 | PHYS 313 | Physics for Scientists I | 4 |

## Biomedical Engineering - BME

| Course Code | Course Title | Course Hours | Transfer Code | Transfer Title | Transfer Hours |
|---|---|---|---|---|---|
| Code | Title | Hours | | | |
| BIOL 135 | Principles of Cell and Molecular Biology L | 4 | BIOL 210 | General Biology I | 4 |
| BIOL 144 | Human Anatomy and Physiology* L | 5 | BIOL 223 & HS 290 & HS 290H | Human Anatomy Physiology and Found Human Anatomy/Physiology and Found Human Anatomy/Physiology | 5 |
| CHEM 124 | General Chemistry I Lecture* (AND) +^ | 4 | CHEM 211 | General Chemistry I | 5 |
| CHEM 125 | General Chemistry I Lab* +^L | 1 | CHEM 211 | General Chemistry I | 5 |
| CHEM 131 | General Chemistry II Lecture* (AND) L | 4 | CHEM 212 | General Chemistry II | 5 |
| CHEM 132 | General Chemistry II Lab* | 1 | CHEM 212 | General Chemistry II | 5 |
| ENGR 251 | Statics* | 3 | AE 223 | Statics | 3 |

## Computer Engineering - CE

| Course Code | Course Title | Course Hours | Transfer Code | Transfer Title | Transfer Hours |
|---|---|---|---|---|---|
| Code | Title | Hours | | | |
| CS 200 | Concepts of Programming Algorithms Using C++* (OR) | 4 | CS 311 | Object-Oriented Programming | 4 |
| CS 202 | Concepts of Programming Algorithms using Python* | 4 | CS 311 | Object-Oriented Programming | 4 |
| CS 235 | Object-Oriented Programming Using C++* | 4 | CS 311 | Object-Oriented Programming | 4 |
| CS 250 | Basic Data Structures using C++* | 4 | CS 400 | Data Structures | 4 |
| PHYS 221 | Engineering Physics II* +^L | 5 | PHYS 314 | Physics for Scientists II | 4 |

## Computer Science - CS

| Course Code | Course Title | Course Hours | Transfer Code | Transfer Title | Transfer Hours |
|---|---|---|---|---|---|
| Code | Title | Hours | | | |
| CS 200 | Concepts of Programming Algorithms Using C++* (OR) | 4 | CS 311 | Object-Oriented Programming | 4 |

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|---|---|---|---|---|---|
| CS 202 | Concepts of Programming Algorithms using Python* | 4 | CS 311 | Object-Oriented Programming | 4 |
| CS 235 | Object-Oriented Programming Using C++* | 4 | CS 311 | Object-Oriented Programming | 4 |
| CS 250 | Basic Data Structures using C++* | 4 | CS 400 | Data Structures | 4 |
| PHYS 221 | Engineering Physics II* +^L | 5 | PHYS 314 | Physics for Scientists II | 4 |

## Cybersecurity - CB

| Course Code | Course Title | Course Hours | Transfer Code | Transfer Title | Transfer Hours |
|---|---|---|---|---|---|
| **Code** | **Title** | **Hours** | | | |
| CSS 120 | Computer User Support Skills* (OR) | 3 | AC 222 | Applied Computing Fundamentals | 3 |
| IT 120 | CompTIA A+ Core 2 (OR) | 3 | AC 222 | Applied Computing Fundamentals | 3 |
| IT 206 | Network Security Fundamentals* | 3 | AC 222 | Applied Computing Fundamentals | 3 |
| CSS 290 | Computer Support Specialist Internship* | 2 | AC 201 AND AC 301 | | |
| ECON 230 | Principles of Macroeconomics +^ | 3 | ECON 201 & ECON 201H | Introduction to Macroeconomics and Prin of Macroeconomics Honors | 3 |
| IT 202 | IT Scripting* | 3 | AC 322 | | |
| MATH 172 | Trigonometry* | 3 | MATH 123 | College Trigonometry | 3 |
| PHYS 130 | College Physics I* +^L | 5 | PHYS 213 | Engineering Physics I | 5 |
| PSYC 130 | Introduction to Psychology +^ | 3 | PSY 111 & PSY 111H | General Psychology and General Psychology Honors | 3 |
| PSYC 220 | Social Psychology* | 3 | PSY 323 & PSY 323H | Social Psychology and Social Psychology Honors | 3 |

## Electrical Engineering - EE

| Course Code | Course Title | Course Hours | Transfer Code | Transfer Title | Transfer Hours |
|---|---|---|---|---|---|
| **Code** | **Title** | **Hours** | | | |
| CHEM 124 | General Chemistry I Lecture* (AND) +^ | 4 | CHEM 211 | General Chemistry I | 5 |
| CHEM 125 | General Chemistry I Lab* +^L | 1 | CHEM 211 | General Chemistry I | 5 |
| CS 200 | Concepts of Programming Algorithms Using C++* (OR) | 4 | CS 311 | Object-Oriented Programming | 4 |
| CS 202 | Concepts of Programming Algorithms using Python* | 4 | CS 311 | Object-Oriented Programming | 4 |

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## Industrial Engineering - IE

| Course Code | Course Title | Course Hours | Transfer Code | Transfer Title | Transfer Hours |
|---|---|---|---|---|---|
| Code | Title | Hours | | | |
| CHEM 124 | General Chemistry I Lecture* (AND) +^ | 4 | CHEM 211 | General Chemistry I | 5 |
| CHEM 125 | General Chemistry I Lab* +^L | 1 | CHEM 211 | General Chemistry I | 5 |
| CS 200 | Concepts of Programming Algorithms Using C++* (OR) | 4 | CS 311 | Object-Oriented Programming | 4 |
| CS 202 | Concepts of Programming Algorithms using Python* | 4 | CS 311 | Object-Oriented Programming | 4 |
| ENGR 131 | Engineering Graphics I:AutoCAD* | 4 | IME 222 | Engineering Graphics | 3 |

## Mechanical Engineering - ME

| Course Code | Course Title | Course Hours | Transfer Code | Transfer Title | Transfer Hours |
|---|---|---|---|---|---|
| Code | Title | Hours | | | |
| CHEM 124 | General Chemistry I Lecture* (AND) +^ | 4 | CHEM 211 | General Chemistry I | 5 |
| CHEM 125 | General Chemistry I Lab* +^L | 1 | CHEM 211 | General Chemistry I | 5 |
| ENGR 131 | Engineering Graphics I:AutoCAD* | 4 | IME 222 | Engineering Graphics | 3 |
| ENGR 251 | Statics* | 3 | AE 223 | Statics | 3 |
| ENGR 254 | Dynamics* | 3 | AE 373 | Dynamics | 3 |

## Product Design & Manufacturing Engineering - PDME

| Course Code | Course Title | Course Hours | Transfer Code | Transfer Title | Transfer Hours |
|---|---|---|---|---|---|
| Code | Title | Hours | | | |
| ENGR 131 | Engineering Graphics I:AutoCAD* | 4 | IME 222 | Engineering Graphics | 3 |
| ENGR 251 | Statics* | 3 | AE 223 | Statics | 3 |
| PHYS 220 | Engineering Physics I* +^L | 5 | PHYS 313 | Physics for Scientists I | 4 |

* JCCC course has a prerequisite or corequisite.
\+ This course fulfills both General Education and program requirements simultaneously.
^ 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.

Last Approved Mon Nov 10 10:13:55 2025