

Division of Natural and Built Environment

University of Missouri - Kansas City

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| Johnson County Community College Transfer Program to the University of Missouri - Kansas City | School of Science & Engineering |
| School of Science and Engineering | 816-235-2399 |
| Division of Natural and Built Environment | sse@umkc.edu |
| Academic Year 2025-2026 | https://sse.umkc.edu |

Program Description

The Associate of Science, AS (<https://catalog.jccc.edu/degree/requirements/associate-science/>) at JCCC is a general transfer degree and partners well with the first two years of most bachelor degree programs. Students pursuing the AS may select courses that satisfy both the AS degree requirements and lower division requirements for a bachelor's degree at four-year institutions. The elective hours within the AS allow students to complete additional general education and lower division courses required for specific majors. The AS 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.

The Division of Natural and Built Environment UMKC offers the following degrees:

- Bachelor of Arts:
 - Urban Planning and Design (<https://catalog.umkc.edu/colleges-schools/science-engineering/architecture-urban-planning-design/urban-planning-design-ba/>)
 - Environmental Studies (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/bachelor-of-arts/>)
- Bachelor of Science
 - Civil Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/civil-engineering/bachelor-of-science-civil-engineering/>)
 - Earth and Environmental Sciences
 - Environmental Science Emphasis (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/bachelor-of-science-environmental-science/>)
 - Geology Emphasis (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/bachelor-of-science-geology/>)
 - Physical Geography Emphasis (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/bachelor-of-science-geography/>)

All UMKC undergraduate degrees require at least 120 credit hours, some programs may require more hours. Students must complete at least 30 credit hours at UMKC and at least 12 upper-division credit hours in their major department/program at UMKC to be eligible to receive an undergraduate degree from UMKC.

General UMKC Transfer Admission Requirements

- 2.25 or higher cumulative GPA (Students between 2.0-2.24 will have the opportunity to petition. Please contact Nate Jacobs in UMKC Admissions for the full policy).
- Credit/no credit may only be applied to elective coursework and will not apply towards UMKC's general education core or major requirements.
- Equivalent courses can be repeated but all grades will be averaged for GPA calculation purposes and students will only receive credit for one attempt.
- Visit the full transfer admission requirements (<https://www.umkc.edu/transfer/apply.html>) for more information.

School of Science and Engineering Transfer Admission Requirements

- Visit the School of Science & Engineering (<https://sse.umkc.edu/admissions/transfer-students.html>) admission requirements by major.

General Education Requirements for Transfer students:

All UMKC undergraduate students complete general education requirements. Completing an Associate of Arts (A.A.) degree or the Associate of Science (A.S.) in General Sciences at JCCC will satisfy all general education requirements at UMKC, including the Constitution requirement. The A.S. is a better option for most students wanting to transfer into SSE. JCCC students transferring to UMKC without completing the A.A. or A.S. will have the option to elect to complete either the UMKC Essentials or the Missouri Transfer (MOTR) Core 42 curriculum to meet general education requirements.

^To learn more about these two options and UMKC general education requirements, including how transfer coursework applies to specific general education requirements (<https://nam12.safelinks.protection.outlook.com/?url=http%3A%2F%2Fnextcatalog.jccc.edu%2Ftransfer-guides%2Fumkc%2Fumkc-general-education%2F&data=05%7C02%7Cskhalif2%40jccc.edu%7C3bbbe8fc84564328cf7008de1320415e%7C15244239dcf245e7aefd127b69fc5438%7C1%7C0%7C638969226426393815%7CUnknown%7CTWFPbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUslIYiOilwLjAuMDAwMCIslIAiOjXaW4zMilslkFOljoiTWFpbCIsIldUljoyfQ%3D%3D%7C0%7C%7C%7C&sdata=%2FvPga7lbeZ0jrCCeMsWei47YJU4Mi5k%2B50ooxjEZup4%3D&reserved=0>).

Urban Planning and Design (BA)

| Course Code | Course Title | Course Hours | Transfer Code | Transfer Title | Transfer Hours |
|--|--|--------------|---------------|----------------------------------|----------------|
| Code | Title | Hours | | | |
| Select one of the following | | | | | |
| ECON 230 | Principles of Macroeconomics | 3 | ECON 201 | Prin. of Macroeconomics | |
| ECON 231 | Principles of Microeconomics | 3 | ECON 202 | Prin. of Microeconomics | |
| GEOS 140 & GEOS 141 | Physical Geography and 3 Physical Geography Lab* | 3 | ENV-SCI 110R | Understanding the Earth with Lab | |
| MATH 171 | College Algebra* | 3 | MATH 110 | "Math, Its Form and Impact" | 3 |
| MATH 161 | Elementary Statistics* | 3 | STAT 235 | Elementary Statistics | |
| Choose two of the following courses (there are additional courses that meet this requirement that are offered at UMKC) | | | | | |
| ART 138 | Digital Imaging for Artists I | 3 | ART 114 | Foundation Digital Design | |
| ART 124 | Design 2D | 3 | ART 121 | Foundation 2D Design | 3 |
| Select one of the following: | | | | | |
| CS 200 | Concepts of Programming Algorithms Using C++* | 4 | COMP-SCI 101 | COMP-SCI 101 | |
| CS 202 | Concepts of Programming Algorithms using Python* | 4 | COMP-SCI 101 | COMP-SCI 101 | |

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|---------|--|---|--------------|---------------------------------|---|
| CS 205 | Concepts of Programming Algorithms using Java* | 4 | COMP-SCI 101 | COMP-SCI 101 | |
| WGS 201 | Global Women's Studies | 3 | REGS 204 | Intro Wmn's/Gend/ Sexuality St. | 3 |

Visit the FL Level II (<https://catalog.jccc.edu/coursedescriptions/fl/>)* for JCCC equivalents.

Select one of the following:

- CHINESE 211 Second Year Chinese I
- FRENCH 211 Second Year French I
- GERMAN 211 Second Year German I
- SPANISH 211 Second Year Spanish I

Environmental Studies (BA)

| Course Code | Course Title | Course Hours | Transfer Code | Transfer Title | Transfer Hours |
|--|--|--------------|------------------------------|----------------------------------|----------------|
| Code | Title | | Hours | | |
| Choose one of the following courses: | | | | | |
| GEOS 130 | General Geology | 5 | GEOLOGY 220 AND GEOLOGY 220L | General Geology with Lab | |
| GEOS 140 & GEOS 141 | Physical Geography and Physical Geography Lab* | 3 | ENV-SCI 110R | Understanding The Earth with Lab | |
| Take each of the following courses | | | | | |
| Foreign Language Level I ^{FL 110} | | | | | |
| Visit the FL Level I for JCCC equivalents. | | | | | |
| Foreign Language Level II ^{FL 120} | | | | | |
| Visit the FL Level II* for JCCC equivalents. | | | | | |
| MATH 171 | College Algebra* | 3 | MATH 110 | "Math, Its Form and Impact" | 3 |
| MATH 161 | Elementary Statistics* | 3 | STAT 235 | Elementary Statistics | |

Civil Engineering (BS)

A minimum of "C-" or better in all math, science, engineering, and computer science coursework is required.

| Course Code | Course Title | Course Hours | Transfer Code | Transfer Title | Transfer Hours |
|-------------------------------------|---|--------------|------------------------|--|----------------|
| Code | Title | | Hours | | |
| Select one of the following: | | | | | |
| BIOL 135 | Principles of Cell and Molecular Biology | 4 | BIOL 108 & BIOLOGY 108 | General Biology I and General Biology I | 3 |
| GEOS 130 | General Geology | 5 | GEOL 220 & GEOLOGY 220 | General Geology and General Geology | 3-4 |
| CHEM 124 & CHEM 125 | General Chemistry I Lecture* and General Chemistry I Lab* | 4 | CHEM 211 & CHEM 211L | General Chemistry I and Experimental Gen Chemistry I | 1 |
| CS 200 | Concepts of Programming Algorithms Using C++* | 4 | EC-ENGR 216 | Engineering Computation | |
| ENGR 251 | Statics* | 3 | CIV-ENGR 275 | Engineering Statics | 3 |
| MATH 161 | Elementary Statistics* | 3 | STAT 235 | Elementary Statistics | |
| MATH 241 | Calculus I* | 5 | MATH 210 | Calculus I | 4 |

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|----------|-------------------------|---|-----------------------|--------------------------------|---|
| MATH 242 | Calculus II* | 5 | MATH 220 | Analytic Geometry Calc I | 4 |
| MATH 243 | Calculus III* | 5 | MATH 250 Calculus III | | |
| MATH 254 | Differential Equations* | 4 | MATH 345 | Ordinary Differential Equation | 4 |
| PHYS 220 | Engineering Physics I* | 5 | PHYSICS 240 | Physics Scientist/Engineers I | 5 |
| PHYS 221 | Engineering Physics II* | 5 | PHYSICS 250 | Physics Scientist/Engineers II | 5 |

Earth and Environmental Sciences (BS) – Environmental Science Emphasis

| Course Code Code | Course Title Title | Course Hours | Transfer Code Hours | Transfer Title | Transfer Hours |
|---------------------|---|--------------|------------------------|--|----------------|
| CHEM 124 & CHEM 125 | General Chemistry I Lecture* and General Chemistry I Lab* | 4 | CHEM 211 & CHEM 211L | General Chemistry I and Experimental Gen Chemistry I | 1 |
| CHEM 131 & CHEM 132 | General Chemistry II Lecture* and General Chemistry II Lab* | 4 | CHEM 212R & CHEM 212LR | General Chemistry II and Experimental Gen Chemistry II | 1 |
| MATH 171 | College Algebra* | 3 | MATH 110 | "Math, Its Form and Impact" | 3 |
| MATH 172 | Trigonometry* | 3 | MATH 125 | Calculus I | 4 |

Select one of the following:

| | | | | | |
|----------|--------------|---|----------|-------------|---|
| MATH 241 | Calculus I* | 5 | MATH 210 | Calculus I | 4 |
| MATH 173 | Precalculus* | 5 | MATH 120 | Precalculus | 5 |

Pick one of the two following sequences:

| | | | | | |
|----------|--|---|------------------------|---|---|
| BIOL 135 | Principles of Cell and Molecular Biology | 4 | BIOL 108 & BIOLOGY 108 | General Biology I and General Biology I | 3 |
| BIOL 150 | Biology of Organisms* | 5 | BIOLOGY 109 109L | General Biology II with Lab | |
| PHYS 130 | College Physics I* | 5 | PHYSICS 210 | General Physic I | 4 |
| PHYS 131 | College Physics II* | 5 | PHYSICS 220 | General Physics II | 4 |

Pick one of the following courses:

| | | | | | |
|---------------------|--|---|------------------------|-------------------------------------|-----|
| GEOS 140 & GEOS 141 | Physical Geography and Physical Geography Lab* | 3 | ENV-SCI 110R | Understanding the Earth with Lab | |
| GEOS 130 | General Geology | 5 | GEOL 220 & GEOLOGY 220 | General Geology and General Geology | 3-4 |

Earth and Environmental Sciences (BS) – Geology Emphasis

| Course Code Code | Course Title Title | Course Hours | Transfer Code Hours | Transfer Title | Transfer Hours |
|---------------------|---|--------------|------------------------|--|----------------|
| CHEM 124 & CHEM 125 | General Chemistry I Lecture* and General Chemistry I Lab* | 4 | CHEM 211 & CHEM 211L | General Chemistry I and Experimental Gen Chemistry I | 1 |
| CHEM 131 & CHEM 132 | General Chemistry II Lecture* and General Chemistry II Lab* | 4 | CHEM 212R & CHEM 212LR | General Chemistry II and Experimental Gen Chemistry II | 1 |
| GEOS 130 | General Geology | 5 | GEOL 220 & GEOLOGY 220 | General Geology and General Geology | 3-4 |
| MATH 171 | College Algebra* | 3 | MATH 110 | "Math, Its Form and Impact" | 3 |
| MATH 172 | Trigonometry* | 3 | MATH 125 | Calculus I | 4 |

Select one of the following:

| | | | | | |
|----------|---------------------|---|-------------|--------------------|---|
| MATH 241 | Calculus I* | 5 | MATH 210 | Calculus I | 4 |
| MATH 173 | Precalculus* | 5 | MATH 120 | Precalculus | 5 |
| PHYS 130 | College Physics I* | 5 | PHYSICS 210 | General Physic I | 4 |
| PHYS 131 | College Physics II* | 5 | PHYSICS 220 | General Physics II | 4 |

Earth and Environmental Sciences (BS) – Physical Geography Emphasis

| Course Code | Course Title | Course Hours | Transfer Code | Transfer Title | Transfer Hours |
|------------------------|---|--------------|---------------------------|--|----------------|
| Code | Title | | Hours | | |
| CHEM 124 & CHEM 125 | General Chemistry I Lecture* and General Chemistry I Lab* | 4 | CHEM 211 & CHEM 211L | General Chemistry I and Experimental Gen Chemistry I | 1 |
| CHEM 131 & CHEM 132 | General Chemistry II Lecture* and General Chemistry II Lab* | 4 | CHEM 212R & CHEM 212LR | General Chemistry II and Experimental Gen Chemistry II | 1 |
| MATH 171 | College Algebra* | 3 | MATH 110 | "Math, Its Form and Impact" | 3 |
| MATH 172 | Trigonometry* | 3 | MATH 125 | Calculus I | 4 |

Select one of the following:

| | | | | | |
|----------|--------------|---|----------|-------------|---|
| MATH 241 | Calculus I* | 5 | MATH 210 | Calculus I | 4 |
| MATH 173 | Precalculus* | 5 | MATH 120 | Precalculus | 5 |

Pick one of the two following sequences:

| | | | | | |
|----------|---|---|--|--------------------|---|
| BIOL 135 | Principles of Cell and Molecular Biology | 4 | BIOLOGY 108 108L General Biology I with Lab | | |
| BIOL 150 | Biology of Organisms* | 5 | BIOLOGY 109 109L General Biology II with Lab | | |
| PHYS 130 | College Physics I* | 5 | PHYSICS 210 | General Physic I | 4 |
| PHYS 131 | College Physics II* | 5 | PHYSICS 220 | General Physics II | 4 |

Pick one of the following courses:

| | | | | | |
|------------------------|--|---|---|--|-----|
| GEOS 140 & GEOS 141 | Physical Geography and Physical Geography Lab* | 3 | ENV-SCI 110R AND ENV-SCI 110L Understanding the Earth with Lab | | |
| GEOS 130 | General Geology | 5 | GEOL 220 & GEOLOGY 220 | General Geology and General Geology | 3-4 |

* JCCC course has a prerequisite or corequisite.

** Denotes courses that must be completed with a grade of "C-" or above.

*** Meets the requirement for the engineering degree but will not count towards a major or minor in Math.