

SCHOOL OF SCIENCE AND ENGINEERING

Overview

School of Science and Engineering

5110 Rockhill Road

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sse.umkc.edu

Dean:

Kevin Z. Truman

Associate Dean of Research and Innovation:

Reza Derakhshani

Associate Dean of Faculty Development:

Kathleen Kilway

Assistant Dean of Academic Affairs:

Katherine Bloemker

Assistant Dean of Student Affairs:

Marjory Eisenman

Division Director of Biological and Biomedical Systems:

Theodore White

Division Director of Computing, Analytics, and Math:

Dianxiang Xu

Division Director of Energy, Matter, and Systems:

Masud Chowdhury

Division Director of Natural and Built Environment:

Kathleen Kilway (Interim)

Accreditation

Chemistry

Our Bachelor of Science degree in chemistry is accredited by the American Chemical Society (<https://www.acs.org/content/acs/en.html>).

Civil Engineering

Our Bachelor of Science in Civil Engineering is accredited by the Engineering Accreditation Commission of ABET (<http://www.abet.org/>).

Computer Science

Our Bachelor of Science in Computer Science is accredited by the Computing Accreditation Commission of ABET (<http://www.abet.org/>).

Electrical and Computer Engineering

Our Bachelor of Science in Electrical and Computer Engineering is accredited by the Engineering Accreditation Commission of ABET (<http://www.abet.org/>).

Information Technology

Our Bachelor of Information Technology program is accredited by the Computing Accreditation Commission of ABET (<http://www.abet.org/>).

Mechanical Engineering

Our Bachelor of Science in Mechanical Engineering program is accredited by the Engineering Accreditation Commission of ABET (<http://www.abet.org/>).

Urban Planning + Design

The Bachelor of Arts in Urban Planning + Design is fully accredited by the Planning Accreditation Board (<https://www.planningaccreditationboard.org/>), which offers information about urban planning program accreditation. The program is a full member of the Association of Collegiate Schools of Planning (ACSP) (<https://www.acsp.org/>), which provides links to all member and accredited planning programs in the United States as well as links to international associations of planning programs.

School Policies

School of Science and Engineering policies, procedures and forms are listed on the SSE website (<https://sse.umkc.edu/current-students/advising-and-academic-support.html>).

Undergraduate

Biological and Biomedical Systems (BBS)

- **Biological Sciences**
 - Minor: Biology (<https://catalog.umkc.edu/colleges-schools/science-engineering/biology/minor-biology/>)
 - Bachelor of Arts: Biology (<https://catalog.umkc.edu/colleges-schools/science-engineering/biology/bachelor-of-arts-biology/>)
 - Bachelor of Science: Biology (<https://catalog.umkc.edu/colleges-schools/science-engineering/biology/bachelor-of-science-biology/>)
 - Bioinformatics Emphasis (<https://catalog.umkc.edu/colleges-schools/science-engineering/biology/bachelor-of-science-bioinformatics/>)
 - Biomedical Sciences Emphasis (<https://catalog.umkc.edu/colleges-schools/science-engineering/biology/bachelor-of-science-biomedical-sciences/>)
 - Biotechnology Emphasis (<https://catalog.umkc.edu/colleges-schools/science-engineering/biology/bachelor-of-science-biotechnology/>)
 - Clinical Laboratory Science Emphasis (<https://catalog.umkc.edu/colleges-schools/science-engineering/biology/bachelor-of-science-clinical-laboratory-science/>)
 - BS-MS Biology/Cellular and Molecular Biology (<https://catalog.umkc.edu/colleges-schools/science-engineering/biology/bs-ms20biology/>)
- **Biomedical Engineering**
 - Bachelor of Science: Biomedical Engineerin (<https://catalog.umkc.edu/colleges-schools/science-engineering/biomedical/bachelor-of-science-biomedical-engineering/>)g
 - BS-MS Biomedical Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/biomedical/bs-ms-biomedical-engineering/>)

Computing, Analytics, and Mathematics (CAM)

- **Computer Science**
 - Minor: Computer Science (<https://catalog.umkc.edu/colleges-schools/science-engineering/computer-science/minor-computer-science/>)
 - Bachelor of Arts: Computer Science (<https://catalog.umkc.edu/colleges-schools/science-engineering/computer-science/bachelor-of-arts-computer-science/>)
 - Bachelor of Information Technology (BIT) (<https://catalog.umkc.edu/colleges-schools/science-engineering/computer-science/bachelor-of-information-technology/>)
 - Bachelor of Science: Computer Science (<https://catalog.umkc.edu/colleges-schools/science-engineering/computer-science/bachelor-of-science-computer-science/>)
 - BS-MS Computer Science/Computer Science (<https://catalog.umkc.edu/colleges-schools/science-engineering/computer-science/bs-ms-computer-science/>)
 - BS-MS Computer Science/Data Science (<https://catalog.umkc.edu/colleges-schools/science-engineering/computer-science/bs-ms-data-science/>)
 - BIT-MS Information Technology/Data Science (<https://catalog.umkc.edu/colleges-schools/science-engineering/computer-science/bs-ms-data-science/>)
- **Mathematics and Statistics**
 - Minors: Actuarial Science (<https://catalog.umkc.edu/colleges-schools/science-engineering/mathematics-statistics/minor-actuarial-science/>); Data Analytics (<https://catalog.umkc.edu/colleges-schools/science-engineering/mathematics-statistics/minor-data-analytics/>); Mathematics (<https://catalog.umkc.edu/colleges-schools/science-engineering/mathematics-statistics/minor-mathematics/>); Statistics (<https://catalog.umkc.edu/colleges-schools/science-engineering/mathematics-statistics/minor-statistics/>)

- Bachelor of Arts: Mathematics and Statistics (<https://catalog.umkc.edu/colleges-schools/science-engineering/mathematics-statistics/ba-mathematics-statistics/>)
- Bachelor of Science: Mathematics and Statistics (<https://catalog.umkc.edu/colleges-schools/science-engineering/mathematics-statistics/bs-mathematics-statistics/>)
- BS-MS Mathematics & Statistics/Mathematics (<https://catalog.umkc.edu/colleges-schools/science-engineering/mathematics-statistics/dual-bs-math-stats-ms-math/>)
- BS-MS Mathematics & Statistics/Statistics (<https://catalog.umkc.edu/colleges-schools/science-engineering/mathematics-statistics/dual-bs-math-stats-ms-stats/>)

Energy, Matter and Systems (EMS)

- **Electrical Computer Engineering**
 - Bachelor of Science: Electrical and Computer Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/electrical-computer-engineering/bachelor-of-science-electrical-computer-engineering/>)
 - BS-MS Electrical and Computer Engineering/Electrical Engineering Program (<https://catalog.umkc.edu/colleges-schools/science-engineering/electrical-computer-engineering/bs-ms-electrical-engineering/>)
- **Chemistry**
 - Minor: Chemistry (<https://catalog.umkc.edu/colleges-schools/science-engineering/chemistry/minor/>)
 - Bachelor of Arts: Chemistry (<https://catalog.umkc.edu/colleges-schools/science-engineering/chemistry/bachelor-of-arts/>)
 - Bachelor of Science: Chemistry (<https://catalog.umkc.edu/colleges-schools/science-engineering/chemistry/bachelor-of-science/>)
 - BS-MS Chemistry (https://catalog.umkc.edu/colleges-schools/science-engineering/chemistry/bs_ms/)
- **Physics**
 - Minors: Astronomy (<https://catalog.umkc.edu/colleges-schools/science-engineering/physics-astronomy/astronomy-minor/>); Physics (<https://catalog.umkc.edu/colleges-schools/science-engineering/physics-astronomy/physics-minor/>)
 - Bachelor of Arts: Physics (<https://catalog.umkc.edu/colleges-schools/science-engineering/physics-astronomy/physics-ba/>)
 - Bachelor of Science: Physics (<https://catalog.umkc.edu/colleges-schools/science-engineering/physics-astronomy/physics-bs/>)
 - Astronomy Emphasis (<https://catalog.umkc.edu/colleges-schools/science-engineering/physics-astronomy/physics-bs-astro-emph/>)
 - Physics/Engineering Double Degree (<https://catalog.umkc.edu/colleges-schools/science-engineering/physics-astronomy/physics-engineering/>)e
 - BS-MS Physics (<https://catalog.umkc.edu/colleges-schools/science-engineering/physics-astronomy/bs-ms-physics/>)
- **Mechanical Engineering**
 - Bachelor of Science: Mechanical Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/mechanical-engineering/bachelor-of-science-mechanical-engineering/>)
 - BS-MS Mechanical Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/mechanical-engineering/bs-ms/>)

Natural and Built Environment (NBE)

- **Civil Engineering**
 - Bachelor of Science: Civil Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/civil-engineering/bachelor-of-science-civil-engineering/>)
 - BS-MS Civil Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/civil-engineering/bs-ms/>)
- **Architecture**
 - Bachelor of Architecture (<https://catalog.umkc.edu/colleges-schools/science-engineering/architecture-urban-planning-design/architecture-major/>)
- **Urban Planning & Design and Historic Preservation**
 - Minor: Urban Studies (<https://catalog.umkc.edu/colleges-schools/science-engineering/architecture-urban-planning-design/minor-urban-studies/>)
 - Bachelor of Arts: Urban Planning and Desig (<https://catalog.umkc.edu/colleges-schools/science-engineering/architecture-urban-planning-design/urban-planning-design-ba/>)
- **Earth and Environmental Sciences**
 - Minors: Environmental Communications (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/minor-environmental-communications/>); Environmental Studies (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/minor-environmental-studies/>); Environmental Sustainability (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/minor-environmental-sustainability/>); Geospatial Science (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/geospatial-science/>); Geology (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/minor-geology/>)

- Undergraduate Certificate: Geographic Information Systems (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/undergraduate-certificate-program-gis/>) (GIS)
- Bachelor of Arts: Environmental Studies (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/bachelor-of-arts/>)
- Bachelor of Science: Earth and Environmental Science
 - 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/>)
- BS-MS: Earth and Environmental Sciences/Environmental and Urban Geoscience (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/bs-ms-environmental/>)s
- BA-MS: Earth and Environmental Sciences/Environmental and Urban Geoscience (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/ba-ms-environmental/>)s

Graduate Biological and Biomedical Systems (BBS)

- **Biological Sciences**
 - Master of Arts: Biology (<https://catalog.umkc.edu/colleges-schools/science-engineering/biology/master-of-arts-biology/>)
 - • Rural Medicine Emphasis (<https://catalog.umkc.edu/colleges-schools/science-engineering/biology/master-of-arts-biology-rural-medicine/>)
 - Master of Science: Cellular and Molecular Biology (<https://catalog.umkc.edu/colleges-schools/science-engineering/biology/master-of-science-cellular-molecular-biology/>)
 - BS-MS Biology/Cellular and Molecular Biology (<https://catalog.umkc.edu/colleges-schools/science-engineering/biology/bs-ms20biology/>)
 - Doctor of Philosophy Natural Sciences: Cell Biology and Biophysics (<https://catalog.umkc.edu/colleges-schools/graduate-studies/cell-biology-biophysics/phd/>)
 - Doctor of Philosophy Natural Sciences: Molecular Biology and Biochemistry (<https://catalog.umkc.edu/colleges-schools/graduate-studies/molecular-biology-biochemistry/phd/>)
- **Biomedical Engineering**
 - Master of Science: Biomedical Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/biomedical/master-of-science-biomedical-engineering/>)
 - BS-MS Biomedical Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/biomedical/bs-ms-biomedical-engineering/>)

Computing, Analytics, and Mathematics (CAM)

- **Computer Science**
 - Master of Science: Computer Science (<https://catalog.umkc.edu/colleges-schools/science-engineering/computer-science/master-of-science-computer-science/>)
 - Master of Science: Data Science and Analytics (<https://catalog.umkc.edu/colleges-schools/science-engineering/computer-science/master-of-science-data-science-analytics/>)
 - BS-MS Computer Science (<https://catalog.umkc.edu/colleges-schools/science-engineering/computer-science/bs-ms-computer-science/>)
 - BS-MS Computer Science/Data Science (<https://catalog.umkc.edu/colleges-schools/science-engineering/computer-science/bs-ms-data-science/>)
 - BIT-MS Information Technology/Data Science (<https://catalog.umkc.edu/colleges-schools/science-engineering/computer-science/bs-ms-data-science/>)
 - Doctor of Philosophy: Computer Science (<https://catalog.umkc.edu/colleges-schools/science-engineering/computer-science/doctor-of-philosophy-computer-science/>)
- **Mathematics and Statistics**
 - Master of Science: Mathematics (<https://catalog.umkc.edu/colleges-schools/science-engineering/mathematics-statistics/master-of-science-mathematics/>)
 - Master of Science: Statistics (<https://catalog.umkc.edu/colleges-schools/science-engineering/mathematics-statistics/master-of-science-statistics/>)
 - BS-MS Mathematics & Statistics/Mathematics (<https://catalog.umkc.edu/colleges-schools/science-engineering/mathematics-statistics/dual-bs-math-stats-ms-math/>)

- BS-MS Mathematics & Statistics/Statistics (<https://catalog.umkc.edu/colleges-schools/science-engineering/mathematics-statistics/dual-bs-math-stats-ms-stats/>)
- Doctor of Philosophy Natural Sciences: Mathematics (<https://catalog.umkc.edu/colleges-schools/graduate-studies/mathematics/phd/>)

Energy, Matter and Systems (EMS)

- **Electrical Computer Engineering**
 - BS-MS Electrical and Computer Engineering/Electrical Engineering Program (<https://catalog.umkc.edu/colleges-schools/science-engineering/electrical-computer-engineering/bs-ms-electrical-engineering/>)
 - Master of Science: Electrical Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/electrical-computer-engineering/master-of-science-electrical-engineering/>)
 - Doctor of Philosophy: Electrical and Computer Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/electrical-computer-engineering/doctor-of-philosophy-electrical-computer-engineering/>)
- **Chemistry**
 - Master of Science: Chemistry
 - Non-Thesis Based (<https://catalog.umkc.edu/colleges-schools/science-engineering/chemistry/master-of-science-non-thesis-based/>)
 - Thesis Based (<https://catalog.umkc.edu/colleges-schools/science-engineering/chemistry/master-of-science-thesis-based/>)
 - BS-MS Chemistry (https://catalog.umkc.edu/colleges-schools/science-engineering/chemistry/bs_ms/)
 - Doctor of Philosophy Natural Sciences: Chem (<https://catalog.umkc.edu/colleges-schools/graduate-studies/cell-biology-biophysics/phd/>)istry (<https://catalog.umkc.edu/colleges-schools/graduate-studies/chemistry/phd/>)
- **Physics**
 - Master of Science: Physics (<https://catalog.umkc.edu/colleges-schools/science-engineering/physics-astronomy/master-of-science-physics/>)
 - BS-MS Physics (<https://catalog.umkc.edu/colleges-schools/science-engineering/physics-astronomy/bs-ms-physics/>)
 - Doctor of Philosophy Natural Sciences: Physics (<https://catalog.umkc.edu/colleges-schools/graduate-studies/physics/phd/>)
- **Mechanical Engineering**
 - Master of Science: Mechanical Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/mechanical-engineering/master-of-science-mechanical-engineering/>)
 - BS-MS Mechanical Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/mechanical-engineering/bs-ms/>)
 - Doctor of Philosophy: Mechanical Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/mechanical-engineering/doctor-of-philosophy-mechanical-engineering/>)

Natural and Built Environment (NBE)

- **Civil Engineering**
 - Graduate Certificate: Engineering and Construction Project Management (<https://catalog.umkc.edu/colleges-schools/science-engineering/civil-engineering/engineering-construction-project-managment-certificate/>)
 - Graduate Certificate: Structural Engineering (https://catalog.umkc.edu/colleges-schools/science-engineering/civil-engineering/grct_structural20engineering/)
 - Master of Science: Civil Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/civil-engineering/master-of-science-civil-engineering/>)
 - BS-MS Civil Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/civil-engineering/bs-ms/>)
 - Doctor of Philosophy: Civil Engineering (<https://catalog.umkc.edu/colleges-schools/science-engineering/civil-engineering/doctor-of-philosophy-civil-engineering/>)
- **Urban Planning & Design and Historic Preservation**
 - Graduate Certificate: Historic Preservation (<https://catalog.umkc.edu/colleges-schools/science-engineering/architecture-urban-planning-design/historic-preservation-grad-cert/>)
- **Earth and Environmental Sciences**
 - Master of Science: Environmental and Urban Geosciences (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/master-of-science-environmental-urban-geosciences/>)
 - BS-MS: Earth and Environmental Sciences/Environmental and Urban Geoscience (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/bs-ms-environmental/>)s
 - BA-MS: Earth and Environmental Sciences/Environmental and Urban Geoscience (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/ba-ms-environmental/>)s

- Graduate Certificate: Geographic Information Systems (<https://catalog.umkc.edu/colleges-schools/science-engineering/ees/graduate-certificate-program-gis/>) (GIS)
- Doctor of Philosophy Natural Sciences: Geosciences (<https://catalog.umkc.edu/colleges-schools/graduate-studies/geosciences/phd/>)