

#### **BACHELOR OF ARTS IN COMPUTER SCIENCE, 2024-25**

For more information about policies and requirements, please see the UMKC 2024-25 Catalog.

FIRST YEAR				
FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS	
MATH 210 Calculus I	4	MATH 220 Calculus II	4	
COMP-SCI 101 Problem Solving & Programming I	3	COMP-SCI 191 Discrete Structures I	3	
COMP-SCI 101L Problem Solving & Programming I Lab	I Lab 1 COMP-SCI 201R Problem Solving & Programming II		3	
ENGLISH 110 English I: Intro to Academic Prose	3	COMP-SCI 201L Problem Solving & Programming II Lab	1	
GEFSE 101 First Semester Experience	3	ENGLISH 225 English II: Intermed Academic Prose	3	
TOTAL	14	TOTAL	14	

SECOND YEAR				
FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS	
COMP-SCI 291 Discrete Structures II	3	COMP-SCI 281R Computer Architecture & Organization	3	
COMP-SCI 303 Data Structures	3	Life Science Elective*	3-5	
STAT 235 Elementary Statistics	3	Foreign Language (120 or higher)	3	
Foreign Language (110 or higher)	3	Communication Requirement (COMM-ST 110, 140, 212 or 277)	3	
GECRT-SS Critical Thinking in Social & Behavioral Sciences	3	GECRT-AH Critical Thinking in Arts & Humanities	3	
TOTAL	15	TOTAL	15-17	

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
COMP-SCI 431 Operating Systems	3	COMP-SCI 304 Ethics & Professionalism	3
Constitution Requirement (HIST 101 OR 102; POL- SCI 210, CJC 364, or HON 230)	3	COMP-SCI 449 Foundations of Software Engineering	3
GECDV Culture & Diversity Course	3	Physical Science Elective*	3-5
GECRT-SC Critical Thinking in Natural & Physical Science	3	General Elective	3
General Elective	3	General Elective	3
TOTAL	15	TOTAL	15-17

FOURTH YEAF	R
-------------	---

FALL SEMESTER	HOURS	SPRING SEMESTER		HOURS
COMP-SCI 451R Software Engineering Capstone	3	COMP-SCI Elective (300/400 level)		3
COMP-SCI Elective (300/400 level)	3	COMP-SCI Elective (400 level)		3
COMP-SCI Elective (300/400 level)	3	General Elective		3
GECUE Civic & Urban Engagement	3	General Elective (300-level or higher)		3
General Elective (300-level or higher)	3	General Elective (300-level or higher)		3
TOTAL	15		TOTAL	15
			· · <b>-</b> · · · ·	

Additional Graduation Requirements: Civics Exam, HElghten Exit Exam. Total Credits to Graduate: 120

\*One of the science courses must have a lab.

## School of Science and Engineering

# Why Major in Computer Science



#### **Beyond the Classroom**

Students build experience by participating in our **student-led teams or organizations**:

- Computer Science Club
- Esports
- Game Development Club
- Math Club
- UMKC Distributed Intelligent Computing Association (UDICA)
- UMKC Robotics
- Women in Science

Students can test ideas and explore the application of augmented and virtual reality in our **ARVR Showroom** on the newest spatial computing equipment.

Students have access to \$1 million-worth of equipment housed in our **High Performance Computing Lab**.

Our **BS in Computer Science is ABET accredited** providing assurance that our curriculum meets the standards for professional advancement.



#### **Personalize Your Degree**

Students have the opportunity to earn an **emphasis in Cybersecurity** or add a minor in a variety of subjects.

Our Computer Science degree includes **specialized major electives** allowing students to expand upon their interests in areas such as:

 AI, Blockchain Technologies, Digital Forensics, Distributed Computing Systems, Network Security, and VR App Development

### **After Graduation**

SSE offers two **STEM Career Fairs** every year to connect students with industry professionals from the **more than 3,900 tech companies** in the area.

As the **most geographically centric technology industry in the nation**, Kansas City is home to the headquarters for companies like Garmin and H&R Block. Students can participate in **innovative and groundbreaking research** alongside a faculty mentors who are leaders in academic patents.

Easily earn a **master's degree** through our BS to MS program which allows students to complete a graduate degree at undergraduate tuition rates.

The Kansas City region has over **100,000 technology jobs in various industries** such as:

- Biotechnology
- Cybersecurity
- Education
- Engineering
- Financial technology
- Telecommunications and more!

