

Four Year Graduation Plan – Courses & Critical Benchmarks:

The following is a sample course of study. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement. For more information see the University Catalog at umkc.edu/catalog.

Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. Critical Courses and minimum recommended grades (as noted below) provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Please Note: Prior to Year 1 (may include summer) Students must have successfully passed (with a "C" or better) MATH 110: College Algebra and MATH 125: Trigonometry or MATH 120: Pre-calculus or have taken four (4) units of high school Mathematics including Trigonometry prior to enrolling in MATH 210: Calculus I.

| | | | | | |
|---------------------------|--|--------------------------------------|-----|--------------------------------|----|
| First Math Course: | STAT 235 Elementary Statistics OR MATH 210 Calculus I | Foreign Language Requirement: | Yes | General Elective Hours: | 35 |
|---------------------------|--|--------------------------------------|-----|--------------------------------|----|

| Critical Course | Course Subject, Number, & Title and Academic Plan Benchmarks Bold = UMKC General Education Core requirement ** Co-Requisite Enrollment Required | Min. Rec. Grade | Credit Hours | Notes |
|---|--|-----------------|--------------|--|
| Fall Semester Year 1: 15-16 hours | | | | |
| ◆ | MATH 210 Calculus I(Focus B) ¹ OR STAT 235 Elementary Statistics (Focus B) ¹ | C | 3-4 | ¹ Enrollment restricted. Must take ALEKS Math Placement Exam or show prerequisite requirement has been met prior to enrolling. ² HISTORY 101, 102, or POL-SCI 210 meet both Focus C & Missouri Constitution Requirements. |
| | Focus C Human Values & Ethical Reasoning Click for options (HISTORY 101, 102, or POL-SCI 210 recommended) | | 3 | |
| | ** DISC 100 Reasoning & Values (Speech & Writing) Click for options | | 3 | |
| | ** ANCHOR I Reasoning & Values Click for Options (ANCH 150 Computing & Engineering in Society Recommended) | | 3 | |
| | General Elective | | 3 | |
| Complete 15+ credit hours toward degree Earn minimum 2.00 term GPA | | | | |
| Spring Semester Year 1: 15-16 hours | | | | |
| ◆ | MATH 220 Calculus II OR STAT 235 Elementary Statistics (Focus Elective) | C | 3-4 | Register for UMKC Roo Career Network . |
| ◆ | COMP-SCI 101 Problem Solving & Programming I | C | 3 | |
| ◆ | COMP-SCI 191 Discrete Structures I | C | 3 | |
| | ** DISC 200 Culture & Diversity (Speech & Writing) Click for options | | 3 | |
| | ** ANCHOR II Culture & Diversity Click for Options | | 3 | |
| Complete 15+ credit hours toward degree Earn minimum 2.00 term GPA | | | | |
| Summer Semester Year 1: 0-4 hours | | | | |
| ◆ | Math 210 or STAT 235 (if not already completed) | C | 3-4 | Recommend completing MATH 210 or STAT 235 over the summer if tested into MATH 100. |
| Complete Anchor I & DISC 100 Complete at least 30 total credit hours toward degree Maintain a minimum 2.00 cumulative GPA | | | | |

| Fall Semester Year 2: 15-16 hours | | | | |
|--|--|--|-----|---|
| | COMP-SCI-201R + 201L Problem Solving & Programming II with Lab | | 4 | Take the RooWriter Assessment after completing DISC 200 and before reaching 90 credit hours. ³ The Foreign Language placement exam is highly recommended to ensure placement in the correct course level. |
| | COMP-SCI 291 Discrete Structures II | | 3 | |
| | STAT 235 Elementary Statistics (Focus Elective) OR MATH 220 Calculus II OR General Elective | | 3-4 | |
| | Foreign Language 110 ³ | | 3 | |
| | General Elective | | 2 | |
| Complete 15+ credit hours toward degree Earn minimum 2.00 term GPA | | | | |
| Spring Semester Year 2: 15-17 hours | | | | |
| | COMP-SCI 281R Computer Architecture & Organization | | 3 | ⁴ Students must take one Life Science and one Physical Science course with a minimum of one lab in one or the other. Students may select from any of the following areas: Biology, Chemistry, Environmental Science, Geography, Geology, Natural Science, Physical Science or Physics. |
| | COMP-SCI 303 Data Structures | | 3 | |
| | Foreign Language 120 | | 3 | |
| | Life or Physical Sciences Course ⁴ (must have at least one lab course) | | 3-5 | |
| | General Elective | | 3 | |
| Complete 15+ credit hours toward degree Earn minimum 2.00 term GPA | | | | |
| Summer Semester Year 2: 0 hours | | | | |
| Complete Anchor II & DISC 200 Complete Foreign Language Requirement (120 or higher) Complete RooWriter Assessment Complete at least 60 credit hours toward degree Maintain minimum 2.00 cumulative GPA | | | | Students may use the summer to ensure completion of 30 hours per academic year or to lighten fall and spring course loads. |
| Fall Semester Year 3: 15 hours | | | | |
| | COMP-SCI 282 Assembler Language Programing | | 3 | |
| | **ANCHOR III Civic & Community Engagement Click for options | | 3 | |
| | **DISC 300 Civic & Community Engagement | | 3 | |
| | General Elective | | 3 | |
| | General Elective | | 3 | |
| Complete 15 credit hours toward degree Earn minimum 2.00 term GPA | | | | |
| Spring Semester Year 3: 12-14 hours | | | | |
| | COMP-SCI 3XX/4XX Major Elective ⁵ | | 3 | ⁵ Students may also take elective courses in E&C-ENGR or INFO-TECH in addition to COMP-SCI. |
| | Life or Physical Sciences Course ⁴ (must have at least one lab course) | | 3-5 | |
| | General Elective | | 3 | |
| | General Elective 3XX/4XX | | 3 | |
| Complete 12+ credit hours toward degree Earn minimum 2.00 term GPA | | | | |

| Summer Semester Year 3: 0 hours | | | | |
|--|--|--|---|---|
| Complete Anchor III & DISC 300 Complete at least 90 credit hours towards degree Maintain minimum 2.00 cumulative GPA | | | | Students may use the summer to ensure completion of 30 hours per academic year or to lighten fall and spring course loads. |
| Fall Semester Year 4: 15 hours | | | | |
| | COMP-SCI 449 Foundations of Software Engineering | | 3 | Apply for graduation & complete your Final Degree Audit for Major and Minor (if applicable). Take the ETS Proficiency Profile (EPP) exit exam. |
| | COMP-SCI 3XX/4XX Major Elective | | 3 | |
| | COMP-SCI 3XX/4XX Major Elective | | 3 | |
| | General Elective 3XX/4XX | | 3 | |
| | General Elective 3XX/4XX | | 3 | |
| Complete 15 credit hours toward degree Earn minimum 2.00 term GPA | | | | |
| Spring Semester Year 4: 12-15 hours | | | | |
| | COMP-SCI 451R Software Engineering Capstone | | 3 | Take Major Field (MF) exit exam. Complete the CSEE Exit Survey two-weeks prior to graduation. |
| | COMP-SCI 4XX Major Elective | | 3 | |
| | Focus A Arts & Humanities Click for options | | 3 | |
| | General Elective 3XX/4XX | | 3 | |
| | General Elective (only if needed to reach 120 hours) | | 3 | |
| Earn minimum 2.00 term GPA | | | | |

| Graduation Requirements Summary | | | | | |
|---------------------------------|---------------------|--------------------------------|-------------------------------|--------------|--------------|
| Total Hours | Total Hours at UMKC | Upper Lvl Hrs in Major at UMKC | Upper (300 / 400) Level Hours | Major GPA | UMKC GPA |
| 120 minimum | 30 minimum | 12 minimum | 36 minimum | 2.00 minimum | 2.00 minimum |

Other Information

A minimum of 30 hours must be earned at the University of Missouri-Kansas City, regardless of the number and level of hours earned at another institution. Undergraduate degree-seeking students are required to earn credit in at least 36 hours of coursework numbered 300 and above at UMKC. In the case of transfer credit, the coursework must be numbered as junior-senior level work by the transferring institution. Community-college transfer coursework cannot count towards the 36-hour requirement.

Non-course Requirements

RooWriter Assessment _____
 Major Field Exam _____
 ETS Proficiency Profile _____

Policy

The University reserves the right to make changes in courses and course schedules. Students are expected to maintain a quality of achievement significantly above minimum UMKC standards for degree work. Individual student progress will be monitored throughout the program. Satisfactory progress is required of all students for retention in the program. Students are expected to maintain academic standards, perform satisfactorily in courses, refrain from academic dishonesty, comply with the established University requirements, and refrain from unethical or unprofessional behavior or behaviors that obstruct the training process or threaten the welfare of the student or others. Other circumstances involving student behavior will be addressed by the faculty on an individual basis.

Advising Contact Information

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816-235-2399
sce@umkc.edu
<http://sce.umkc.edu/>

Career Opportunities

UMKC Career Services – career.umkc.edu | 816-235-1636 | 2nd Floor, Atterbury Student Success Center
O*Net OnLine – OnetOnline.org Enter the Classification of Instructional Programs (CIP) number of your major to learn about related careers.
Major CIP: 110701