

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: Students who do not place into MATH 120 Pre-Calculus or higher may have to complete preparatory math coursework, potentially adding 3 hours to the total hours required for the degree.

First Math Course:	MATH 120 Pre-Calculus	Foreign Language Requirement:	No	General Elective Hours:	21
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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: 14 hours				
◆	MATH 120 Pre-Calculus ¹ (Focus B)	C-	5	1 Enrollment restricted. Must take ALEKS Math Placement Exam or show prerequisite requirement has been met prior to enrolling. 2 HISTORY 101, 102, & POL-SCI 210 fulfill both the Focus Elective & Missouri Constitution requirement .
	Focus C Human Values & Ethical Reasoning Click for options Recommend HISTORY 101, 102, or POL-SCI 210 ³		3	
	**Anchor I Reasoning & Values Click for options		3	
	**DISC 100 Reasoning & Values (Speech & Writing) Click for options		3	
Complete 14+ credit hours toward degree Earn minimum 2.00 term GPA				
Spring Semester Year 1: 16-18 hours				
◆	MATH 210 Calculus I (Focus Elective)	C-	4	3 Bachelor of Science (BS) students in the Colleges of Arts & Sciences must complete at least 60 total hours of math and science coursework. Math BS students need to complete 15 additional hours of math or science beyond the major to reach the minimum 60 hours. Register for UMKC Roo Career Network .
	MATH or Science Elective Course ³ (PHYSICS 240 Physics for Scientists & Engineers I recommended)		3-5	
	**Anchor II Culture & Diversity Click for options		3	
	**DISC 200 Culture & Diversity (Speech & Writing) Click for options		3	
	General Elective		3	
Complete 16+ credit hours toward degree Earn minimum 2.00 term GPA				
Summer Semester Year 1				
◆	MATH 210 Calculus I (if not already completed)	C-	4	Recommend completing MATH 210, over the summer if tested into MATH 100.
Complete Anchor I & DISC 100 Complete MATH 210 Calculus I Complete at least 30 total credit hours toward degree Maintain a minimum 2.00 cumulative GPA				
Fall Semester Year 2: 16-18 hours				
◆	MATH 220 Calculus II	C-	4	Take the RooWriter Assessment after completing DISC 200. Must
	CAS Science & Math Requirement Click for options (Must take at least one science course with lab if not already completed)		3-5	

	MATH or Science Elective Course		3	complete prior to enrolling in a Writing Intensive (WI) course.
	Focus A Arts & Humanities Click for options		3	
	General Elective		3	
Complete 16+ credit hours toward degree Earn minimum 2.00 term GPA				
Spring Semester Year 2: 16 hours				
◆	MATH 250 Calculus III	C-	4	
	MATH or STAT 3XX/4XX Elective Click for options (MATH 301 On Solid Ground Sets & Proofs recommended)		3	
	CAS Social & Behavioral Sciences Requirement Click for options (Complete MO Constitution requirement if not met above)		3	
	CAS Arts & Humanities Requirement Click for options		3	
	General Elective		3	
Complete 16 credit hours toward degree Earn minimum 2.00 term GPA				
Summer Semester Year 2				
Complete Anchor II & DISC 200 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: 15-16 hours				
◆	MATH 300 Linear Algebra		3	
	MATH 345: Ordinary Differential Equations OR MATH 406: Partial Differential Equations OR MATH 430: Numerical Analysis I OR STAT 436: Introduction to Mathematical Statistics I		3-4	
	**Anchor III Civic & Community Engagement Click for options		3	
	**DISC 300 Civic & Community Engagement (Speech & Writing) Click for options		3	
	MATH or Science Elective Course		3	
Complete 15+ credit hours toward degree Earn minimum 2.00 term GPA				
Spring Semester Year 3: 15-17 hours				
	MATH 410 Modern Algebra ⁴ OR MATH or STAT 3XX/4XX Elective Click for options		3	⁴ The major requires Math 410 or Math 420. A student may take both, but often one of these is replaced by another Math/Stat 3XX/4XX Elective.
	CAS Science & Math Requirement Click for options (Must take at least one science course with lab)		3-5	
	CAS Social & Behavioral Sciences Requirement Click for options		3	
	CAS Arts & Humanities Requirement Click for options		3	
	General Elective		3	
Complete 15+ 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				
	MATH 420 Linear Algebra II OR MATH or STAT 3XX/4XX Elective Click for options		3	Apply for graduation & complete your Final Degree Audit for Major and Minor (if applicable). Take the ETS Proficiency Profile (EPP) exit exam.
	MATH 402 Advanced Analysis I		3	
	MATH or Science Elective Course		3	
	General Elective		3	
	General Elective		3	
Complete 15 credit hours toward degree Earn minimum 2.00 term GPA				
Spring Semester Year 4: 12 hours				
	3XX/4XX Writing Intensive Course (MATH 464WI History of Mathematics Recommended)		3	Take Major Field (MF) exit exam.
	MATH or STAT 3XX/4XX Elective Click for options		3	
	MATH or Science Elective Course		3	
	General Elective (if required 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

College of Arts & Sciences Student Services
 09 Scofield Hall (basement)
<http://cas.umkc.edu/advising/default.asp>
 816-235-1148

Career Opportunities

UMKC Career Services – career.umkc.edu | 816-235-1636 | 2nd Floor, Atterbury Student Success Center.
O*Net OnLine – OnetOnline.org Learn about careers related to your major, income potential, and more.