

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.

coursework.

First Math Course:	MATH 210 Calculus I	Foreign Language Requirement:	No	General Elective Hours:	10
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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: 15-18 hours				
◆	MATH 210 Calculus I ¹ (Focus B) OR MATH 120 Pre-Calculus ¹ (Focus B) OR MATH 125 Trigonometry ¹ (if MATH 110 Pre-Calculus Algebra completed)	B	2-5	¹ Enrollment restricted. Must take ALEKS Math Placement Exam or show prerequisite requirement has been met prior to enrolling.
◆	CHEM 211 + 211L General Chemistry I with Lab	B	5	
	**Anchor I Reasoning & Values Click for options		3	
	**DISC 100 Reasoning & Values (Speech & Writing) Click for options		3	
	Focus A Arts & Humanities (if taking Math 125) Click for options		3	
Complete 15+ credit hours toward degree Earn minimum 2.00 term GPA				
Spring Semester Year 1: 15 hours				
◆	MATH 220 Calculus II	B	4	Register for UMKC Roo Career Network . ² HISTORY 101, 102, & POL-SCI 210 fulfill both the Focus Elective & Missouri Constitution requirement .
◆	PHYSICS 240 Physics for Scientists & Engineers I	B	5	
	ASTR 150 Motions of the Cosmos (even years, Focus Elective) OR ASTR 155 Starlight & Star Stuff (odd years, Focus Elective)		3	
	Focus C Human Values & Ethical Reasoning Click for options Recommend HISTORY 101, 102, or POL-SCI 210 ²		3	
Complete 15 credit hours toward degree Earn minimum 2.00 term GPA				
Summer Semester Year 1: 0 hours				
Complete Anchor I & DISC 100 Complete at least 30 total credit hours toward degree Maintain a 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 2: 15 hours				
◆	MATH 250 Calculus III	B	4	Take the RooWriter Assessment after completing DISC 200. Must
◆	PHYSICS 250 Physics for Scientists & Engineers II	B	5	

	**Anchor II Culture & Diversity Click for options	B	3	complete prior to enrolling in a Writing Intensive (WI) course.
	**DISC 200 Culture & Diversity (Speech & Writing) Click for options		3	
Complete 15 credit hours toward degree Earn minimum 2.00 term GPA				
Spring Semester Year 2: 15 hours				
◆	PHYSICS 350 Modern Physics	B	3	
◆	COMP-SCI 101 Problem Solving & Programming I	B	5	
	ASTR 353 Practical Astronomy (even years) OR PHYSICS 410 Thermal Physics (odd years)		3	
	ASTR 150 Motions of the Cosmos (even years) OR ASTR 155 Starlight & Star Stuff (odd years)		3	
	Focus A Arts & Humanities (if not taken in Fall Year 1) Click for options		3	
Complete 14+ credit hours toward degree Earn minimum 2.00 term GPA				
Summer Semester Year 2: 0 hours				
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 hours				
	PHYSICS 310 Mechanics I		3	
	PHYSICS 330 Methods of Theoretical Physics I		3	
	ASTR 355 Stellar Astrophysics (even years) OR ASTR 356 Galaxies (odd years)		3	
	**Anchor III Civic & Community Engagement Click for options		3	
	**DISC 300 Civic & Community Engagement (Speech & Writing) Click for options		3	
Complete 15 credit hours toward degree Earn minimum 2.00 term GPA				
Spring Semester Year 3: 15 hours				
	PHYSICS 311 Mechanics II		3	
	ASTR 353 Practical Astronomy (even years) OR PHYSICS 410 Thermal Physics (odd years)		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 (PHYSICS 499 Undergraduate Research recommended)		3	
Complete 15 credit hours toward degree Earn minimum 2.00 term GPA				
Summer Semester Year 3: 0 hours				
	Recommend Summer Research Project/Internship		0	Students may use the summer to ensure completion of 30 hours per academic year or to lighten fall and spring course loads.
Complete Anchor III & DISC 300 Complete at least 90 credit hours towards degree Maintain minimum 2.00 cumulative GPA				
Fall Semester Year 4: 15 hours				
	ASTR 355 Stellar Astrophysics (even years) OR ASTR 356 Galaxies (odd years)		3	

	PHYSICS 460 Electricity & Magnetism I		3	Apply for graduation & complete your Final Degree Audit for Major and Minor (if applicable). Take the ETS Proficiency Profile (EPP) exit exam.
	PHYSICS 472 Introduction to Quantum Mechanics		3	
	PHYSICS 476LW Advanced Lab Writing Intensive (odd years) OR PHYSICS 395L Computer Interfacing Laboratory (even years)		3	
	CAS Social & Behavioral Sciences Requirement Click for options		3	
Complete 15 credit hours toward degree Earn minimum 2.00 term GPA				

Spring Semester Year 4: 12-15 hours

	ASTR 465 Cosmology (odd years) OR PHYSICS 410 Thermal Physics (even years)		3	Take Major Field (MF) exit exam.
	PHYSICS 461 Electricity & Magnetism II		3	
	CAS Arts & Humanities Requirement Click for options		3	
	General Elective		3	
	General Elective (if needed to reach 120 hours)		0-3	
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.