

Four-Year Graduation Plan - Courses and 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. **All incoming freshmen must develop an academic plan (which maps out all courses needed to graduate within your intended major/degree). Your academic advisor is available to meet with you and create your specific plan.**

Your path to graduation may vary slightly 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.

First Math	MATH 110 or MATH 116, or 200-level MATH/STAT	Foreign Language Requirement	Yes	Free Elective Hours	9-24
------------	--	------------------------------	-----	---------------------	------

Critical Course or Benchmark	Course Subject, Number, and Title and Academic Plan Benchmarks Bold = UMKC General Education Core Requirement *Prerequisite May Be Required **Co-Requisite Enrollment Required	Min Recom Grade	Credit Hours (CH)	Notes
------------------------------	---	-----------------	-------------------	-------

Fall Semester Year 1: 13-16 hours

	**Anchor I: Reasoning and Values Click for options		3	ALEKS Math Placement Exam is required prior to enrollment in MATH 110 and some 200-level MATH/STATS courses. MATH 110 & MATH 210 can satisfy Focus B: Scientific Reasoning & Quantitative Analysis Requirement . CHEM 211L fulfills CAS Laboratory Experience Requirement. MATH 110 or any MATH/STAT at the 200 level fulfills the CAS Math Requirement.
	**DISC 100: Reasoning and Values (Speech and Writing)		3	
	Focus B: Scientific Reasoning and Quantitative Analysis **CHEM 211: General Chemistry I	C-	4	
	**CHEM 211: General Chemistry I Laboratory	C-	1	
	*MATH 110: College Algebra (CAS Science & Math Requirement) OR *MATH 120: Precalculus OR *MATH 125: Trigonometry OR *MATH 210: Calculus I OR *MATH 220: Calculus II	C-	2-5	
	Complete 15 term hours toward degree (recommended), 12 minimum (required) Earn minimum 2.000 term GPA Earn minimum 2.000 cumulative UM GPA			

Spring Semester Year 1: 15 hours


	**Anchor II: Culture and Diversity Click for options		3	Any MATH/STAT at the 200 level fulfills CAS Math Requirement.
	**DISC 200: Culture and Diversity (Speech and Writing)		3	
	*/**CHEM 212R: General Chemistry II (Focus Elective)	C-	4	
	*/**CHEM 212LR: General Chemistry II Laboratory	C-	1	
	*MATH 210: Calculus I (CAS Science & Math Requirement) OR *MATH 220: Calculus II OR *MATH 250: Calculus III	C-	4	
	Complete Anchor I and DISC 100 Complete 15 term hours toward degree (recommended), 12 minimum (required) Complete 30 total hours minimum toward degree Earn minimum 2.000 term GPA			

Earn minimum 2.000 cumulative UM GPA

Summer Semester Year 1: 0 hours if all previous courses completed

May use summer semester ensure completion of 30 hours per academic year or to lighten fall and spring course loads.


Fall Semester Year 2: 16 hours

	*/**CHEM 321: Organic Chemistry I	C-	3	Take the RooWriter Writing Assessment the semester immediately following DISC 200 and at least a semester before registering for a Writing Intensive course.
	*/**CHEM 321L: Organic Chemistry I Lab	C-	1	
	*PHYSICS 240: Physics for Scientists and Engineers I	C-	5	
	*MATH 220: Calculus II OR *MATH 250: Calculus III OR Free Elective	C-	4	
	Focus A: Arts and Humanities Click for options		3	



Complete 15 term hours toward degree (recommended), 12 minimum (required)
Earn minimum 2.000 term GPA
Earn minimum 2.000 cumulative UM GPA

Spring Semester Year 2: 16 hours

	*/**CHEM 322R: Organic Chemistry II	C-	3	POL-SCI 210, HISTORY 101 or 102 fulfill Focus C as well as the Missouri Constitution requirement.
	*/**CHEM 322L: Organic Chemistry II Lab	C-	1	
	*PHYSICS 250: Physics for Scientists and Engineers II	C-	5	
	*MATH 250: Calculus III OR Free Elective	C-	4	
	Focus C: Human Actions, Values, and Ethics Click for options		3	



Complete Anchor II and DISC 200
Complete 15 term hours toward degree (recommended), 12 minimum (required)
Complete 60 total hours toward degree
Earn minimum 2.000 term GPA
Earn minimum 2.000 cumulative UM GPA


Summer Semester Year 2: 0 hours if all previous courses completed

May use summer semester ensure completion of 30 hours per academic year or to lighten fall and spring course loads.

Fall Semester Year 3: 14-16 hours


	Anchor III: Civic and Community Engagement- Click for options		3
	**DISC 300: Civic and Community Engagement (Speech and Writing)		3
	*CHEM 431: Physical Chemistry I	C-	3
	*CHEM 341: Analytical Chemistry with Lab	C-	4

	*CHEM 410: Chemical Literature	C-	1
	<i>Free Elective (only take these credits if necessary)</i>		0-2

 <p>Complete RooWriter Writing Assessment Complete 15 term hours toward degree (recommended), 12 minimum (required) Earn minimum 2.000 term GPA Earn minimum 2.000 cumulative UM GPA</p>

Spring Semester Year 3: 15 hours

	* CHEM 432: Physical Chemistry II	C-	3
	* CHEM 437WI: Experimental Physical Chemistry I (CAS Writing Intensive Requirement)	C-	3
	* CHEM 451R: Inorganic Chemistry	C-	3
	Missouri Constitution course (if not fulfilled above – Click for options) or other CAS Social & Behavioral Sciences Requirement course – Click for options		3
	Free Elective		3


 <p>Complete 15 term hours toward degree (recommended), 12 minimum (required) Earn minimum 2.000 term GPA Earn minimum 2.000 cumulative UM GPA</p>
--

Summer Semester Year 3: 0 hours if previous courses completed

				May use summer semester to ensure completion of 30 hours per academic year or to lighten fall and spring course loads.
--	--	--	--	--

Fall Semester Year 4: 14-16 hours

	* CHEM 382: Inorganic and Organic Synthesis	C-	2	Apply for graduation and complete Final Degree Audits for the following: UMKC General Education Core, CAS Degree Requirements, Major Requirements, and/or Minor Requirements.
	* CHEM 367: Bioorganic Chemistry	C-	3	
	CAS Social & Behavioral Sciences Requirement - Click for options		3	
	CAS Arts & Humanities - Click for options		3	
	Free Elective		3	
	<i>Free Elective (only take these credits if necessary)</i>		0-2	Take the ETS Proficiency Profile (EPP) exit exam.

 <p>Complete 15 term hours toward degree (recommended), 12 minimum (required) Earn minimum 2.000 term GPA Earn minimum 2.000 cumulative UM GPA</p>
--

Spring Semester Year 4: 12-15 hours

	*CHEM 442R	C-	3	In combination with required upper-level courses, take enough Free Elective hours at the 300/400-level to meet the minimum requirement of 36 upper-level credit hours.
	*3XX/4XX: Advanced Work Major Requirement – Click for options	C-	3	
	CAS Arts & Humanities - Click for options		3	
	Free Elective		3	
	<i>Free Elective (only take these credits if needed to reach 120 minimum hours)</i>		0-3	Take Major Field (MF) exam.



Complete 15 term hours toward degree (recommended), 12 minimum (required)
 Earn minimum 2.000 term GPA
 Earn minimum 2.000 cumulative UM GPA

Graduation Requirements Summary

Total Hours (120 minimum)	Total Hours at UMKC (30 hours min)	Major GPA	UMKC GPA
120	30	2.0	2.0

Other Information and Policy

Non-course requirements

Met

- RooWriter Writing Assessment
- ETS Proficiency Profile (EPP) exam
- Major Field (MF) exam

The School reserves the right to make changes in courses, degree requirements and course schedules without notice.

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 and teacher education timetables and 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.

A minimum of 36 upper-level hours required for graduation.

Advising Contact Information

College of Arts and Sciences Advising
 09 Schofield Hall (Basement)
 816.235.1148
<http://cas.umkc.edu/advising/default.asp>

Career Opportunities

UMKC Career Services Resources: <http://www.career.umkc.edu/?q=node/87>
 O*Net OnLine: <http://www.onetonline.org/find/>