

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.

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|------------|----------|------------------------------|----|---------------------|-------|
| First Math | MATH 120 | Foreign Language Requirement | No | Free Elective Hours | 13-27 |
|------------|----------|------------------------------|----|---------------------|-------|


| 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 |
|------------------------------|---|-----------------|-------------------|-------|
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Fall Semester Year 1: 15 hours

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| | **Anchor I: Reasoning and Values - Click for options | | 3 | The ALEKS Math Placement Exam is required prior to enrollment in MATH 120. POL-SCI 210, HISTORY 101 or 102 fulfill Focus C: Human Actions, Values, and Ethics as well as the Missouri Constitution requirement. |
| | **DISC 100: Reasoning and Values (Speech and Writing) | | 3 | |
| | Focus C: Human Actions, Values, and Ethics – Click for options (May choose Focus C course to also fulfill MO Constitution Requirement) | | 3 | |
|  | MATH 120: Precalculus | C- | 5 | |
| | Free Elective | | 1 | |

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|--|--|
|  | Complete 15 term hours toward degree (recommended), 12 minimum (required) Earn minimum 2.000 term GPA Earn minimum 2.000 cumulative UM GPA |
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Spring Semester Year 1: 15 hours

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| | **Anchor II: Culture and Diversity Click for options | | 3 |
| | **DISC 200: Culture and Diversity (Speech and Writing) | | 3 |
|  | Focus B: Scientific Reasoning and Quantitative Analysis – MATH 210: Calculus I | C- | 4 |
| | Focus Elective—Strongly Recommended: PHYSICS 240: Physics for Scientists and Engineers I | | 5 |


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

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


Fall Semester Year 2: 16 hours

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|  | MATH 220: Calculus II | C- | 4 | Take the RooWriter Writing Assessment the semester immediately following DISC 200 and at least a semester before registering for a Writing Intensive course. |
| | CAS Science & Math Requirement - Click for options | | 3 | |
| | Electives in Math or Science (for BS) | | 3 | |
| | Focus A: Arts and Humanities Click for options | | 3 | |
| | Free Elective | | 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: 16-17 hours

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|  | MATH 250: Calculus III | C- | 4 |
| | MATH 301: On Solid Ground: Sets and Proof OR MATH/STAT 3XX/4XX: Mathematics/Statistics elective – Click for options | | 3-4 |
| | Missouri Constitution course (if not fulfilled by above) – OR other CAS Social & Behavioral Sciences Requirement – Click for options | | 3 |
| | CAS Arts & Humanities Requirement - Click for options | | 3 |
| | Free Elective | | 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

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| | | | | May use summer semester ensure completion of 30 hours per academic year or to lighten fall and spring course loads. |
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Fall Semester Year 3: 15-16 hours

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| | **Anchor III: Civic and Community Engagement Click for options | | 3 |
| | **DISC 300: Civic and Community Engagement (Speech and Writing) | | 3 |
| | 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 |
| | Elective hours in Math or Science (for BS), if needed | | 3 |

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| | OR Free Elective | | |
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| ♦ | 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 | | |

Spring Semester Year 3: 15-17 hours

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| | ^MATH 410: Modern Algebra OR MATH/STAT 3XX/4XX: Mathematics/Statistics elective – Click for options | | 3 | ^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 – Must take Lab Science to fulfill Laboratory requirement | | 3-5 | |
| | CAS Social & Behavioral Sciences Requirement - Click for options | | 3 | |
| | CAS Arts & Humanities Requirement - Click for options | | 3 | |
| | Elective hours in Math or Science (for BS), if needed OR Free Elective | | 3 | |

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

Summer Semester Year 3: 0 hours if all previous courses completed

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Fall Semester Year 4: 15 hours

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| | MATH 402: Advanced Analysis I | | 3 | Apply for graduation and complete Final Degree Audits for the following: UMKC General Education Core, CAS Degree Requirements, Major Requirements, and/or Minor Requirements. |
| | MATH 420: Linear Algebra II OR MATH/STAT 3XX/4XX: Mathematics/Statistics elective – Click for options | | 3 | |
| | Elective hours in Math or Science (for BS), if needed OR Free Elective | | 3 | |
| | Elective hours in Math or Science (for BS), if needed OR Free Elective | | 3 | |
| | Free Elective | | 3 | Take the ETS Proficiency Profile (EPP) exit exam. |

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| ♦ | 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 4: 10-13 hours

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| | 3XX/4XX: Writing Intensive Course (CAS Writing Intensive Requirement)—Recommended: MATH 464WI: History of Mathematics | | 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. |
| | MATH/STAT 3XX/4XX: Mathematics/Statistics elective – Click for options | | 3-4 | |
| | Free Elective | | 4 | |
| | <i>Free Elective (only take these credits if needed to reach 120 minimum hours)</i> | | 0-2 | Take Major Field (MF) exam. |

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

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|---|------------|
| Non-course requirements RooWriter Writing Assessment ETS Proficiency Profile (EPP) exam Major Field (MF) exam | Met |
|---|------------|

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 Scofield 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/>