

PROGRAM NAME: Mathematics
PROGRAM COLLEGE: College of Business, Influence, and Information Analysis
CATALOG TERM: Fall 19

In the Mathematics major/minor, students gain valuable skills in abstract thinking and theoretical as well as applied areas of mathematics. The Mathematics major may be better suited for students thinking about pursuing a graduate degree in pure Mathematics.

Rockhurst University Mathematics is committed to providing relevant and practical courses, as well as extracurricular opportunities that develop students' lifelong commitment to learning, leadership and service. Students acquire the mathematical, computing and soft skills necessary to meet the growing demands of our community in mathematics fields and to become strong, socially responsible leaders.

It is easy to double major as a mathematics major. Typical double majors are Education, Analytics and Technology, Computer Science, Physics, Economics, and Biochemistry.

NOTE: Individual Programs of Study will vary in consultation with your Advisor and course/section availability each term. The below schedule serves only as an **example** four year degree plan. **YEAR 1**

Fall Semester

Course Name	Credits	Minimum Grade Required	Experience Notes
Core: Written Communication (WCP)	3		<ul style="list-style-type: none"> Join an RU Academy Participate in the Finucane Service Project Attend the New Student Retreat
Core: Philosophical Mode Lv I	3		
Core: Theological Mode Lv I	3		
MT 1800 Calculus I (MTP)	4	C	
Rockhurst elective	3		
TOTAL HOURS	16		

Spring Semester

Course Name	Credits	Minimum Grade Required	Notes
Core: Oral Communication (OCP)	3		<ul style="list-style-type: none"> Join a campus club/organization (can be dept. specific)
Core: Artistic Mode	3		
MT 1810 Calculus II	4	C	
MT 2200 Mathematical Computing	3	C	
Rockhurst elective	3		
TOTAL HOURS	16		

YEAR 2

Fall Semester

Course Name	Credits	Minimum Grade Required	Notes
Core: Historical Mode Lv I	3		
Core: Scientific Causal Mode Lv I	3		
MT 2800 Calculus III (MTP)	4	C	
Upper Division MT	3	C	
Rockhurst elective	3		
TOTAL HOURS	16		

Spring Semester

Course Name	Credits	Minimum Grade Required	Notes
Core: Literary Mode Lv I	3		
Core: Scientific-Relational Mode Lv I	3		
MT 2900 Preparation for a Mathematical Future	1	C	
MT 3800 Intro to Abstract Math (odd Spring)	3	C	
MT 3810 Linear Algebra	3	C	
Rockhurst elective	3		
TOTAL HOURS	16		

YEAR 3

Fall Semester

Course Name	Credits	Minimum Grade Required	Notes
Core: Historical Mode or Literary Mode Lv II	3		
Core: Philosophical Mode Lv II	3		
Core: Scientific-Causal or Relational Mode Lv II	3		
Real Analysis or Abstract Algebra (UMKC)	3	C	
Rockhurst elective	3		
Rockhurst elective	3		
TOTAL HOURS	18		

Spring Semester

Course Name	Credits	Minimum Grade Required	Notes
Core: Philosophical Mode Lv II	3		The experiential learning requirement is satisfied by completing an off-campus internship/work experience (in an approved, mathematically related field) together with <u>at least one</u> credit hour of the Career Services course, CP 3910 - Co-op Work Projects I.
Core: Scientific-Relational Mode Lv II	3		
MT 3800 Intro to Abstract Math (odd Spring)	3	C	
CP 3910 - Co-op Work Projects I	1-3		
Rockhurst elective	3		
Rockhurst elective	3		
TOTAL HOURS	16-18		

YEAR 4

Fall Semester

Course Name	Credits	Minimum Grade Required	Notes
Core: Theological Mode Lv II	3		
Core: Global Perspectives	3		
Upper Division MT	3	C	
Rockhurst elective	3		
Rockhurst elective	3		
TOTAL HOURS	15		

Spring Semester

Course Name	Credits	Minimum Grade Required	Notes
Core: Philosophical Mode or Theological Mode Lv II	3		
Upper Division MT	3		
Rockhurst elective	3		
Rockhurst elective	3	C	
TOTAL HOURS	15		

Credit Hours

- Core: 55
- Major: 38
- Electives: 35

TOTAL Credit Hours: 128

MT 1170 Math in the Modern World: Geometry, should be taken in sophomore or junior year if double majoring with Education.