Bachelor of Science in Mathematics -- 120 Credits

Applied Track
JMATH-BS/JMAPPLIED (RG 389)
Effective August 2023

GENERAL EDUCATION REQUIREMENTS

REQUIRED COURSES (RG 6813)

Foundational Courses		CR	Satisfied/Term	
Engcmp 0005	Composition I	3		
Engcmp 0006	Composition II	3		
CommRc 0052	Public Speaking	3		
Basic Algebra or Placement Test				
Math 0001	Algebra 1	3		
Quantitative Reasoning (QR) - 1 Course				
Note - a student cannot test out of their QR requirement.				
		3		

FREE ELECTIVES

Free electives are the balance of credits required for graduation (120) that are not used to satisfy competencies, knowledge areas, major requirements, electives, or any related area required by the department.

	CR	Satisfied/Term	

WORLDS OF KNOWLEDGE (RG 6825)

Aesthetic and Creative Expression (RQ 3148)					
Subject	Number	Course Title	CR	Satisfied/Term	
			3		
			3		

Global History & Culture (RQ 3149)					
Subject	Number	Course Title	CR	Satisfied/Term	
			3		
			3		

Societies & Civics (RQ 3150)					
Subject	Number	Course Title	CR	Satisfied/Term	
			3		
			3		

Science & Nature (RQ 3153)					
Subject	Number	Course Title	CR	Satisfied/Term	
CS	0100	Persp. In CS	3		
			3		

Follow-Up Courses (RQ 3154)					
Subject	Number	Course Title	CR	Satisfied/Term	
			3		
			3		

Each student must take 2 courses in each World of Knowledge. The two courses taken within each World must be from different subjects. A student must take two additional "Follow-Up" courses from any World.

>The minimum number of courses taken in the Worlds must be 10.
>The Follow-Up courses may repeat a subject previously taken in a World.
>A student cannot use a major required Subject course in one of the Worlds.
>For example: A Biology student cannot use BIOL 0110 to fulfill a requirement in the Science and Nature World.
>Students cannot use a course to count both in their QR requirement and one of the Worlds.
>Students can choose QR and Worlds of Knowledge courses from published course lists.

MAJOR REQUIREMENTS (RG 389)

Required Math Courses (RQ 3560)		CR	Satisfied/Term	
Math 0221	Analytic Geom & Calc 1	4		
Math 0231	Analytic Geom & Calc 2	4		
Math 0241	Analytic Geom & Calc 3	4		
Math 0401	Discrete Math Structures	3		
Math 1012	Intro Theoretical Math	3		
Requirement Satisfied		**18**		

(RQ 3561)

Required Upper Level Math Courses		CR	Satisfied/Term	
Math 1153	Intro Probability Stats 1	3		
Math 1154	Intro Probability Stats 2	3		
Math 1163	Mathematics Seminar	1		
Math 1181	Linear Algebra 1	3		
Math 1271	Ordinary Diff Equations 1	3		
Requirement Satisfied		**16**		

Math Electives (RQ 1056)				
Select one of the following courses		**CR**	Satisfied/Term	
Math 1125	Abstract Algebra	3		
Math 1531	Advanced Calculus 1	3		
Math 1561	Complex Variables & Apps	3		
Math 1701	Intro to Topology	3		
Select one of the following courses		**CR**	Satisfied/Term	
Math 1071	Numerical Math Analysis	3		
Math 1175	Topics in Applied Math	3		
Math 1178	Operations Research	4		
Math 1179	Math Modeling	3		
Math 1296	Topics in Applied Stats 1	3		
Select any 2 Math 1000 level courses		**CR**	Satisfied/Term	
Math		3		
Math		3		
Requirement Satisfied		**12-13**		

Minor or Certificate Requirement (18-21 Credits) Select a minor or certificate program from outside Mathematics. (RQ 3563)			
	CR	Satisfied/Term	
Requirement Satisfied	**18-21**		

Required Comp Sci Courses (RQ 3562)		CR	Satisfied/Term	
CS 0100	Perspectives in Comp Science	3		
CS 0410	Intro to CS Applications	1		
CS 0411	Intro to CS Programming	3		
Requirement Satisfied		**7**		

MGPA (RQ 1064)
Major 50% (RQ 2880)

Reviewed 3/30/2026

IMPORTANT INFORMATION:

This sheet is an unofficial representation of the major requirements and the information is subject to change. It is not an official record of academic progress and should not be treated as such. Official degree information can only be obtained through the Division Office or the Office of the Registrar.