Mercy University

Academic Program Sequence Map

Program Degree Type and Name: <u>B.S. in Mathematics</u>   **Catalog Year:** <u>2025-2026</u>

Program Level: Undergraduate   **Academic Term Type: Semester**

* Denote core course with an asterisk and (cc) next to the course number

Course Number & Title	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Milestone/Advice
Math 116:College Algebra	3	x			C or Higher		GC
Math 120: Intro Comp. & App Software	3	x				ENGL 109 or dept.approval	
English 111	3	x					
Gen Ed or ENGL 110	3	x					
CINQ 101	3	x					
Term Credit Total:	15	15					

Course Number & Title	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Milestone/Advice
Math 201: Precalculus	3	x				Math 116 or B in hs algebra	GC
Math 131: Foundations of Comp. 1	3	x				CISC/Math 120 or dept approval	
ENGL 112	3	x					
COMM 110	3	x					
Gen Ed	3	x					
Term Credit Total:	15	15	0				

Course Number & Title	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Milestone/Advice
Math 231: Foundations of Comp. 2	3		x		C or Higher	MATH/CISC 131 or dept approval	
**Math 260: Calculus 1	4		x		C or Higher	Math 201	GC
Gen Ed	3	x					
Gen Ed	3	x					
Gen Ed	3	x					
Term Credit Total:	16	9	7				

Course Number & Title	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Milestone/Advice
**Math 261: Calculus 2	4		x		C or Higher	Math 260	GC
Math 244: Discrete Structures	3		x			Math 201	
Gen Ed	3	x					
Gen Ed	3	x					
Open Elective	3			x			
Term Credit Total:	16	6	7	3			

Course Number & Title	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Milestone/Advice
Math 360: Calculus 3	4		x			Math 261	
Math 350: Probability Theory & App	3		x			Math 261	
Math 315: Linear Algebra	3		x			Math 260	
Open Elective	3			x			
JRSM 301	3	x				ENGL 112, SPCM 110, MATH116	
Term credit total:	16	3	10	3			

Course Number & Title	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Milestone/Advice
Math 351: Statistics: Theory & App	3		x			Math 261, Math 350 or dept. Approval	
Math 307: Number Theory	3		x			Math 261	
Gen Ed	3	x					
Gen Ed	3	x					
Open Elective	3			x			
Term Credit Total:	15	6	6	3			

Course Number & Title	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Milestone/Advice
Open Elective	3			x			
Major Elective	3		x				
Major Elective	3		x				
Gen Ed	3	x					
Open Elective	3			x			
Term Credit Total:	15	3	6	6			

Course Number & Title	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Milestone/Advice
Major Elective	3		x			Math 315, Math 350 or 360	
Math 365: Algebraic Structures	3		x			Math/CIS 315	
*Math 417: Mathematical Modeling (cc)	3		x			CISC/MATH 213, MATH 380/360	
Gen Ed	3	x					
Term Credit Total:	12	3	9				

Program Totals	Credits: 120	General Education: 60	Major & Major Elective: 45	Open Elective: 15

Legend: CR: Credits   GE: General Education   Maj: Major / Major Elective   OE: Open Elective   SM: Success Marker   Co/Prerequisite(s): List of co/ prerequites for noted course GC: Gateway Courses CA: Career Activity ELC: Experiential Learning Course WBE: Work-Based Experience