

			Odd Fall	Even Spring	Even Summer	Even Fall	Odd Spring	Odd Summer
Total # of Courses			11	11	2	11	11	2
Credit Hours			33	33	6	33	33	6
Req. Math Ed	MAT 5963	Intro to Math Ed research				3		
	MAT 5053	Perspectives on Teaching*	3					
	MAT 5043	Euclidean and Non-Euclidean Geometry - cross listed		3			3	
	MAT 5013	Computing for Mathematics - cross listed			3			3
	MAT 5033	Foundations and Fundamental Concepts of Math (ramp course)	3			3		3
	MAT 5103	Introduction to Mathematical Analysis (ramp course)						
AIM	AIM 5113	Introduction to Industrial Mathematics						
	AIM 5323	Mathematical Modeling						
Electives	MAT 6603	Introduction to Optimization - cross listed		3			3	
	MAT 5643	Optimal Control & Calculus of Variations			3			
	MAT 5453	Quantum Logic - cross listed with Logic & Computability		3			3	
	MAT 5423	Discrete Mathematics - cross listed	3			3		
CORE	MAT 5653	Differential Equations I		3			3	
	MAT 5283	Linear Algebra - cross listed	3			3		
	MAT 5603	Numerical Analysis	3			3		
	MAT 5203	Real Analysis I		3			3	
Qualifying Exam Tracks	MAT 5173	Algebra I				3		
	MAT5183	Algebra II					3	
	MAT 5123	Cryptography - cross listed		3			3	
	MAT 5143	Cryptography II - cross listed	3					
	MAT	Quantum Information Theory - cross listed	3			3		
	MAT 5153	Data Analytics - cross listed	3			3		
	MAT 5423	Discrete Mathematics II - cross listed		3			3	
	MAT	Mathematical Foundations of AI - cross listed		3				
	MAT	Mathematical Foundations of Quantum Computing - cross listed					3	
	MAT 5223	Complex Analysis I	3					
	MAT 5233	Complex Analysis II						
	MAT 5313	Real Analysis II						
	MAT 5203	Functional Analysis I				3		
	MAT 5213	Functional Analysis II						
	MAT 5553	Harmonic Analysis						
	MAT 5243	General Topology I					3	
	MAT 5253	General Topology II						
	MAT	Differential Geometry - cross listed		3				
	MAT 5613	Numerical Solutions of Differential Equations		3				
	MAT 5163	Probability and Computing	3					
	MAT 5673	Partial Differential Equations I				3		
	MAT 5683	Partial Differential Equations II						
	MAT 5323	Mathematical Modeling					3	
	MAT 5133	Mathematical Biology		3				
	MAT 5863	Math Physics I - cross listed				3		
	MAT	Math Physics II - cross listed	3					