College of Science - Mathematics, BS with Concentration in Applied Mathematics				
Catalog Year: 2020-2021			**Grades**	
Mason Core Requirements: 27 credits	**Course Information**	Credits	Earned	Needed
Written Communication:	ENGH 101 (100)	3		
Oral Communication:		3		
*Quantitative Reasoning	*Satisfied by Major Requirements			
*Information Technology	*Satisfied by Major Requirements (CS 112)			
Arts		3		
Global Understanding		3		
Literature		3		
*Natural Science	*Satisfied by Major Requirements			
Social & Behavioral Sciences		3		
Western Civilization/World History		3		
Written Communication:	ENGH 302	3		
Synthesis/Capstone		3		
Major Requirements (63 - 69 credits in major with Concentration in Applied Mathematics) A maximum of 6 credits of grades below 2.00 in coursework designated MATH or STAT may be applied toward the major				
MATH 113	Analytic Geometry and Calculus I	4		
MATH 114	Analytic Geometry and Calculus II	4		
MATH 203	Linear Algebra	3		
MATH 213	Analytic Geometry and Calculus III or	3		
or MATH 215	Analytic Geometry and Calculus III (Honors)			
MATH 214	Elementary Differential Equations or	3		
or MATH 216	Theory of Differential Equations			
MATH 300	Introduction to Advanced Mathematics	3		
MATH 322	Advanced Linear Algebra	3		
CS 112	Introduction to Computer Programming	4		
Science Requirement: Select a one-year sequence of a laboratory science from the following courses (8-9 credits):				
BIOL 213 and One from the following: BIOL 300, 308, or 311	Cell Structure and Function AND BioDiversity, Foundations of Ecology & Evolution, OR General Genetics			
CHEM 211/213 & CHEM 212/214	General Chemistry I & II with Labs			
GEOL 101 & GEOL 102	Introductory Geology I & II			
PHYS 160/161 or 260/261	University Physics I & II with Labs			
Applied Mathematics (28 - 33 credits)				
MATH 125	Discrete Mathematics I (Mason Core)	3		
MATH 315	Advanced Calculus I	3		
MATH 351	Probability	3		
MATH 413	Modern Applied Mathematics I	3		
MATH 414	Modern Applied Mathematics II	3		
MATH 446	Numerical Analysis I	3		
Select 6 additional credits of MATH courses numbered above 300				
Additional Math above 300 Course #1:				
Additional Math above 300 Course #2:				
Additional Science: Select additional science credits from one of the following three options (4-9 credits):				
A second sequence from the choices under "Science" above				
6 credits from more advanced courses in biology, chemistry, geology, or physics 2				
The 4-credit option of PHYS 262 and PHYS 263				
Degree Notes				
Approx. 24 - 30 remaining credits may be completed with elective courses to bring the degree total to 120 with 45 of these credits at the 300/400 level. All graduating seniors are required to have an exit interview.				
Advisor Notes:				