SAMPLE PROGRAM OF STUDY FOR STUDENTS ON PATHWAYS GEN ED
College of Science - Bachelor of Science
Major in Mathematics - Applied Discrete Mathematics Option
Total of 120 credit hours needed for graduation

There is considerable flexibility in designing a program of study. The example given below is not likely to fit every situation and is provided for information as you develop your own plan with your advisor.

Fall Semester Freshman			Credits
ENGL	1105	First-Year Writing (**Pathway 1f – Foundational** Discourse)	3
MATH	1225	Calculus of a Single Variable (**Pathway 5f – Foundational** Quantitative and Computational Thinking)	4
MATH	1004	Discovering Mathematics I (F)	1
		Pathway 2 Critical Thinking in the Humanities	3
		Pathway 3 Reasoning in the Social Sciences	3
		Pathway 6a Critique and Practice in the Arts	3
			17

Spring Semester Freshman			Credits
ENGL	1106	First-Year Writing (**Pathway 1f – Foundational** Discourse)	3
MATH	1226	Calculus of a Single Variable (**Pathway 5f – Foundational** Quantitative and Computational Thinking)	4
MATH	1044	Discovering Mathematics II (S)	2
CS	1114	Intro to Software Design	3
		Pathway 2 Critical Thinking in the Humanities	3
			15

Fall Semester Sophomore			Credits
MATH	2114	Introduction to Linear Algebra	3
MATH	2204	Intro Multivariable Calculus	3
CS	2114	Software Design and Data Structures (**Pathway 6d** Critique and Practice in Design)	3
		Pathway 3 Reasoning in the Social Sciences	3
		Pathway 4 Reasoning in the Natural Sciences	3
			15

Spring Semester Sophomore			Credits
MATH	2214	Intro Differential Eqns (**Pathway 5a – Advanced** Quantitative and Computational	3
MATH	3034	Introduction to Proofs	3
CS	2505	Introduction to Computer Organization	3
		Pathway 4 Reasoning in the Natural Sciences	3
		Pathway 7 Critical Analysis of Identity and Equity in the US	3
			15

Fall Semester Junior			Credits
MATH	3124	Modern Algebra	3
MATH	3214	Calculus of Several Variables	3
MATH	3134	Applied Combinatorics	3
CS	3114	Data Structures and Algorithms	3
		Free Elective	3
			15

Spring Semester Junior			Credits
MATH	3144	Linear Algebra I	3
MATH	3224	Advanced Calculus	3
STAT		STAT 4105, STAT 4705, or STAT 4714	3
		Free Elective	3
		Free Elective	3
			15

Fall Semester Senior			Credits
MATH	41xx	4000-level MATH course[1]	3
MATH	4xxx	4000-level MATH course	3
CS	4104	Data and Algorithm Analysis	3
		Free Elective	3
		Free Elective	3
			15

Spring Semester Senior			Credits
MATH	41xx	4000-level MATH course[1]	3
MATH	4xxx	4000-level MATH course	3
		Pathway 1a – Advanced Discourse	3
		Free Elective	3
		Free Elective	3
			15

[1]At least two courses from the following list must be taken: Math 4124 (F), 4134 (S), 4144 (S), 4175, 4176, 5114 (S), 5454 (F), 5464 (S).

Refer to approved checksheets for restrictions on Math 4xxx-level course requirements.
(F) = offered fall semesters only; (S) = offered spring semesters only