# Completing a Mathematics B.S.

<b>General Education (Pathways)</b>	45 credits
Math Major Requirements	approx. 60-75* credits
Free Electives	9-21 credits
Total	120 credits

- ✓ More free elective credits could be possible by satisfying multiple requirements with a single course.
- ✓ Some major requirements satisfy Pathways requirements, and those credits are counted twice above, leaving every student with some free electives.



\*Range depends on degree option

### First Year Experience (FYE) MATH 1004 - Discovering Mathematics I

#### *Fall: 1 credit, P/F; CRN 87005 Spring: MATH 1044, 2 credits, A-F*

Yearlong course:

the math major

career opportunities

LaTeX

geometry beyond Euclid

mathematical modeling

graph theory

research... and much more!

Meet:

other first-year math majors

upper-class math majors

mathematics department faculty members & advisors



### Math Course Selection Calculus Sequence

#### MATH 1214 (Preparation for Calculus, 3 credits)

No calculus transfer credit; Have not passed ALEKS placement assessment with 80 or higher

#### MATH 1225 (Calculus 1, 4 credits)

No calculus transfer credit; Have passed ALEKS

#### MATH 1226 (Calculus 2, 4 credits)

Transfer credit for 1225

MATH 2204 (Multivariable Calculus, 3 credits)

Transfer credit for 1225 and 1226



### Mathematics in a Computational Context MATH 2405H-2406H

Prerequisites: MATH 1225 and MATH 1226

Yearlong honors course (5 credits fall; 5 credits spring)

Covers MATH 2114, 2214, and 2204

Alt: 2114, 2214, 2204 as individual courses in same timeframe

Fast-paced and conceptual

Motivated by applications and taught with attention to algorithmic implementation

Will teach math in a context in which computers are a tool to be used \*when needed\* to handle hard problems



## Programming Requirement

All Degree Options:

Consider MATH 1454: Intro to Math Programming

Introduction to programming in MATLAB language

Focused on mathematical applications

Must at least be enrolled in and Eligible for MATH 1225

Applied Discrete (ADM) Option:

CS 1114 (MATH 1225 Corequisite)

