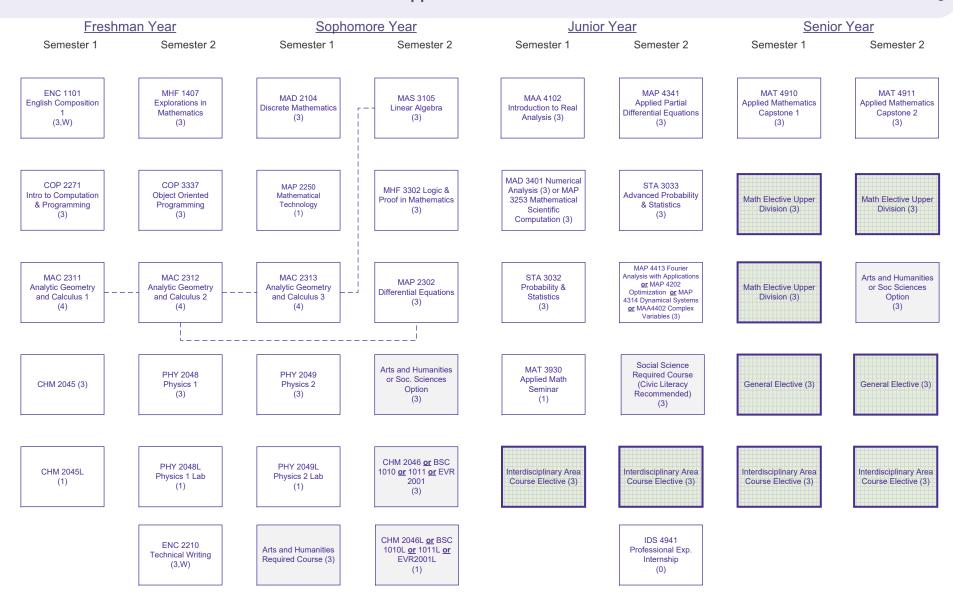
# **BS** in Applied Mathematics





Legend:

Course Prefix & Number | Course Name | Credits

General Education Elective | Credits Program or Concentration Elective | Credits

C grade or better is required

### **Advanced Mathematics Course Lists**

#### **Math Elective Courses**

12 credit hours at the 3000 - 4000 level required.

- MTG 4302 Elements of Topology 1 Credits: 3
- MTG 4303 Elements of Topology II Credits: 3
- MAP 4484 Mathematical Modeling in Biology I Credits: 3
- MAP 4494 Mathematical Modeling in Biology II Credits: 3
- MAP 3305 Engineering Mathematics 1 Credits: 3
- MAP 3930 Special Topics Applied Mathematics Credits: 3
- MAP 4202 Optimization Theory Credits: 3
- MAP 4306 Engineering Mathematics II Credits: 3
- MAP 4413 Fourier Analysis with Applications Credits: 3
- MAP 4314 Dynamical Systems Credits: 3
- MAD 3105 Discrete Mathematics II Credits: 3
- MAP4103 Mathematical Modeling Credits: 3

## General Education

#### **Arts & Humanities**

Select 3 to 9 credits from the following courses: Required, one from the following:

- ARH 2000 Art Appreciation (W)
- HUM 2020 Introduction to Humanities (W)
- LIT 2000 Introduction to Literature (W)
- PHI 2010 Introduction to Philosophy (W)
- MUL 2010 Music Appreciation

Optional, one (1) from the following OR one more from Arts & Humanities required or Social Sciences:

IDS 2144 Legal, Ethical, and Management Issues in Technology

### Social Sciences

Select 3 to 9 credits from the following courses: Required, one from the following:

- AMH 2020 American History Since 1877 (W-Civic Literacy)
- AMH 2010 American History to 1877 (W)-Civic Literacy)
- POS 2041 American Government (Civic Literacy)
- ECO 2013 Principles of Macroeconomics (W)
- PSY 2012 General Psychology (W)

Optional, one (1) from the following OR one more from Social Science required or Arts and Humanities:

• ECO 2023 Principles of Microeconomics (W)

#### **Interdisciplinary Elective Courses**

12 credit hours generally at the 3000-4000 level from a department outside of Applied Mathematics subject to department approval.

#### **General Elective Courses**

6 credit hours at any level and from any department.

