

# **Major Fact Sheet**

#### Mathematics, B.A. Pure Concentration

## What will I be studying?

The undergraduate mathematics program offers a diversity of courses designed not only to enable the student to pursue a profession in mathematics itself, but also to enhance the student's competence in the fields of engineering, the physical sciences, the life sciences, and the social sciences. The program emphasizes the broad nature of modern mathematics and its close associations with the real world and prepares students for careers in industry or secondary education, as well as entry into graduate school.

#### **Career Ideas!**

Mathematicians can work in any industry or any government agency in a variety of roles:

Actuary

**Operations and Research Analyst** 

Engineering

**Secondary Math Education** 

Mathematician

**Computer Programmer** 

**Physicist & Astronomer** 

Meteorology

Accountancy, Finance or Banking



**USF Math Club** 

**Nagle Lectures** 

**American Mathematical Society** 

**Mathematical Association of America** 

**Society of Actuaries** 

**Career Services** 



## **Get Involved!**

# **Example Four Year Plan**

Year 1		
Fall	Spring	Summer
Supporting Science and Lab (CHM, BSC, GLY, PHY)	Supporting Science and Lab (CHM, BSC, GLY, PHY)	Non-Major Elective
MAC 2311: Calculus I**	MAC 2312: Calculus II	Enhanced Gen-Ed: Info & Data Literacy
ENC 1101: Composition 1	ENC 1102: Composition 2	
Core Humanities	Enhanced Gen-Ed: Creative Thinking	
Total Hours: 14	Total Hours: 14	Total Hours: 6
	Year 2	
Fall	Spring	Summer
MAC 2313: Calculus III	Foreign Language Level 2	Upper-Level Non-Major Elective
Foreign Language Level 1	MGF 3301: Bridge to Abstract Math	Upper-Level Non-Major Elective
Enhanced Gen-Ed: Human/Cultural Diversity	MAP 2302: Differential Equations	
Core Social Science Course	Non-Major Elective	
Total Hours: 14	Total Hours: 13 Year 3	Total Hours: 6
Fall	Spring	Summer
MAS 3105: Linear Algebra	COP 4313: Symbolic Computation	Summer
MAS 3156: Vector Calculus	MAS 4301: Elementary Abstract Algebra	
Enhanced Gen-Ed: Ethical Reasoning & Civic Engagement	Major: Upper-Level Elective Requirement	
Non-Major Elective	Enhanced Gen-Ed: High Impact Practice	
Non-Major Elective	Non-Major Elective	
Total Hours: 15	Total Hours: 15	Total Hours: 0
	Year 4	
Fall	Spring	Total Credits to Graduation
Major: Algebra/Discrete Requirement	Major: Advanced Analysis Requirement	Major Requirements:
MAA 4211: Intermediate Analysis I	Major: Geometry/Topology Requirement	53 credit hours
Non-Major Elective	Upper-Level Non-Major Elective	General Education Requirements:
Upper-Level Non-Major Elective	Non-Major Elective	– 27 credit hours
		Other Degree Requirements: 41 credit hours
Total Hours: 12	Total Hours: 12	Total= 120-121

\*\*May require completion of additional math pre-requisites (consider the MPT or CPT exams)