Major Fact Sheet

Mathematics: Computational and Applied – Data Analytics & Business Intelligence Concentration, B.S.

USF
UNIVERSITY OF
SOUTH FLORIDA
COLLEGE OF ARTS & SCIENCES

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:**

- ❖ Economist
- ❖ Education
- ❖ Computer Programmer Systems
- ❖ Systems Analyst
- ❖ Actuary
- ❖ Data miner
- ❖ Market Research Analyst
- ❖ Financial Analyst
- ❖ Post-secondary Academia & Research
- ❖ Data Analyst/Scientist
- ❖ Statistician
- ❖ Insurance Underwriter

**Please note this is not a complete list of careers

Contact Us

Science Center (SCA) 239

mathadvise@usf.edu

www.

Get Involved!

USF Math Club

Nagle Lectures

American Mathematical Society

Mathematical Association of America

Society of Actuaries

Career Services

Mathematics and Statistics Department
Mathematics: Computational & Applied – Data Analytics and Business Intelligence Concentration, B.S.

Example Four Year Plan

Year 1

Fall	Spring	Summer
Supporting Science and Lab (CHM, BSC, EVR, PHY)	STA 2023: Introductory Statistics I	Enhanced Gen-Ed: Human/Cultural Diversity
MAC 2311: Calculus I**	MAC 2312: Calculus II	Non-Major Elective
ENC 1101: Composition 1	ENC 1102: Composition 2	
Core Humanities	Enhanced Gen-Ed: Info & Data Literacy	
Total Hours: 14	Total Hours: 13	Total Hours: 6

Year 2

Fall	Spring	Summer
MAC 2313: Calculus III	MAP 2302: Differential Equations	Upper-Level Non-Major Elective
STA 3024: Introductory Statistics II	STA 4102: Computation Methods for Applied Statistics	Upper-Level Non-Major Elective
ECO 2013: Core Social Sciences	ECO 2023: Enhanced Gen Ed: Creative Thinking	
ACG 2021: Principles of Financial Accounting	Non-Major Elective	
Non-Major Elective		
Total Hours: 16	Total Hours: 12	Total Hours: 6

Year 3

Fall	Spring	Summer
STA 4442: Introduction to Probability	Major Concentration Elective	
MAS 3114: Computational Linear Algebra	STA 4321: Introduction to Mathematical Statistics	
COP 2030: Programming Concepts	Enhanced Gen-Ed: High Impact Practice	
Non-Major Elective	Upper-Level Non-Major Elective	
	Non-Major Elective	
Total Hours: 12	Total Hours: 15	Total Hours: 0

Year 4

Fall	Spring	Total Credits to Graduation
Major Concentration Elective	Major Concentration Elective	**Major Requirements:** 61 credit hours
Enhanced Gen-Ed: Ethical Reasoning & Civic Engagement	MAP 4103: Mathematical Modeling	
Non-Major Elective	Upper-Level Non-Major Elective	**General Education Requirements:** 21 credit hours
Non-Major Elective	Upper-Level Non-Major Elective	
Upper-Level Non-Major Elective		**Other Degree Requirements:** 38 credit hours
Total Hours: 15	Total Hours: 12	Total= 120 - 121

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