In order to be admitted into the College of Arts & Sciences, students must have a lower-level overall grade point average of 2.5 or greater.

Students must complete the Florida State mandated Civics Literacy Requirement in one of two ways: (1) Successful completion of either POS 2041 OR AMH 2020 or (2) Passing the Civics Literacy Exam.

NOTE: The recommended 4-year plan is designed as a blueprint for students to complete their degrees within a 4-year period. This plan is a recommended sequence of courses. Students should meet with their Academic Advisor and a Computational & Applied Mathematics faculty member to develop a more individualized plan to complete their degree.

For more information, please contact Dr. Joan Eldridge, Coordinator of Advising for the College of Arts and Sciences at eldridge@mail.usf.edu or 727-873-4152.

To schedule an appointment, please visit usfweb.usf.edu/escheduler/student.aspx

USFSP.edu/coas

YEAR ACADEMIC PLAN

BACHELOR OF SCIENCE IN COMPUTATIONAL & APPLIED MATHEMATICS
### 4 YEAR ACADEMIC PLAN

**FIRST YEAR / FRESHMAN**

**FALL (16 credit hours)**
- ENC 1101: English Composition I (3)
- MAC 2311: Calculus I (GE Mathematics) (4)
- SLS 1107: University Success (3)
- **VARIES:** GE Social Science (3)
- **VARIES:** GE Humanities (3)

**SPRING (14 credit hours)**
- ENC 1102: English Composition II (3)
- MAC 2312: Calculus II (GE Mathematics) (4)
- STA 2023: Introductory Statistics I (GE Mathematics) (3)
- **VARIES/L:** GE Natural Science + Lab (4)

**SUMMER** *(6 credit hours)*
- **VARIES:** GE Elective (3)
- **VARIES:** GE Elective (3)

**SECOND YEAR / SOPHOMORE**

**FALL (13 credit hours)**
- MAC 2313: Calculus III (4)
- COP 2030: Programming Concepts (3)
- STA 3024: Introductory Statistics II (3)
- **VARIES:** GE Social Science (3)

**SPRING (16 credit hours)**
- MAC 2302: Differential Equations (3)
- MGF 3301: Bridge to Advanced Mathematics (3)
- STA 4102: Computational Methods for Applied Statistics (3)
- **VARIES:** GE Elective (meeting State Communication Requirement) (3)

**SUMMER** *(6 credit hours)*
- **VARIES:** GE Natural Science (3)
- **VARIES:** GE Humanities (3)

**THIRD YEAR / JUNIOR**

**FALL (15 credit hours)**
- MAS 3105: Linear Algebra I (3)
- MAD 3107: Discrete Mathematics (3)
- MTG 3212: Geometry (3)
- **VARIES:** Concentration Course I (3)
- **VARIES:** Major Works/Major Issues Exit (3)

**SPRING (15 credit hours)**
- MAS 3156: Vector Calculus (3)
- MAD 4401: Numerical Analysis (3)
- STA 4442: Introduction to Probability (3)
- **VARIES:** Concentration Course II (3)
- **VARIES:** Literature & Writing Exit (State Comm. Req.) (3)

**FOURTH YEAR / SENIOR**

**FALL (12 credit hours)**
- MAP 4310: Mathematical Modelling (3)
- MAT 4930: Senior Capstone (3)
- **VARIES:** Concentration Course III (3)
- **VARIES:** Concentration Course IV (3)

**SPRING (11-12 credit hours)**
- MAT 4940: Senior Internship (3)
- **VARIES:** Concentration Course V (3)
- **VARIES:** Concentration Course VI (3)
- **VARIES:** Major Works and Major Issues Exit (3)

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*All undergraduate students are required to take a minimum of 6 credit hours of summer coursework*

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### MAJOR ELECTIVES

**CONCENTRATION ELECTIVE COURSES**
- MAT 4211: Intermediate Analysis (3)
- MAD 4203: Introduction to Combinatorics (3)
- MAD 4301: Introduction to Graph Theory (3)
- MAD 4471: Introduction to Cryptography and Coding Theory (3)
- MAS 4214: Elementary Number Theory (3)
- MAS 4301: Elementary Abstract Algebra (3)
- MHF 4403: The Early History of Mathematics (3)
- MHF 4406: The History of Modern Mathematics (3)
- MTG 4214: Modern Geometry (3)

**DATA ANALYTICS & BUSINESS INTELLIGENCE CONCENTRATION (18 hours required)**
- ACG 2021: Principles of Financial Accounting (3)
- ECO 2013: Economic Principles (Macroeconomics) (3)
- FIN 3403: Principles of Finance (3)
- ISM 4544: Data Visualization (3)
- ISM 4546: Predictive Analysis (3)
- MAN 3025: Principles of Management (3)
- MAR 3023: Basic Marketing (3)