**MATHEMATICS**

**COLLEGE:** ARTS AND SCIENCES  
**SCHOOL:** NONE  
**DEGREE:** BACHELOR OF ARTS  
**OPTION/TRACK:** NON-LIMITED ACCESS TRACK

**LIMITED ACCESS PROGRAM:** NO

**CAMPUS(ES) WHERE OFFERED/CONTACT:**  
TAMPA / Coordinator of Advising, Arts and Sciences, (813) 974-2503  
FT. MYERS / Advisor, Arts and Sciences, (941) 432-5500

- Program of Study at a Florida Community/Junior College or SUS School for Students Planning to Transfer to USF  
  **(State Mandated Common Prerequisites)**  
  Students wishing to transfer to USF should complete the A.A. degree at the community college. Some courses required for the major may also meet General Education Requirements thereby transferring maximum hours to the university. A minimum of 60 semester hours must be completed at the university unless prior approval is secured.  
  A student who transfers without an A.A. degree and has fewer than 60 semester hours of acceptable credit must meet the university’s entering freshman requirements including ACT or SAT test scores, GPA, and course requirements.  
  Students should complete the following **prerequisite courses** listed below at the lower level prior to entering the University. If these courses are not taken at the community college, they must be completed before the degree is granted. Unless stated otherwise, a grade of “C” is the minimum acceptable grade.

  - COP XXXX Computer Language Course (Pascal, FORTRAN, C, C+, or C++)
  - MAC X311 Calculus I
  - MAC X312 Calculus II
  - MAC X313 Calculus III

  Students must also complete two laboratory-based science courses, 4 - 8 semester hours total, from the respective science majors: Biology, Chemistry, or Physics.

- Admission Requirements to the University Program of Study  
  Please be aware of the immunization, foreign language, and continuous enrollment policies of the university. This is a non-limited access program with the above courses recommended.

- Requirements for the Major in Mathematics  
  The courses taken to satisfy the requirements below will constitute the major program referred to in the general graduation requirements of the College of Arts and Sciences. A minimum of 12 hours of 4000 level or higher mathematics courses must be taken in residency and must be applicable to the major.

  **Mathematics Requirement (Min. 45 cr. hrs.)**  
  Majors must complete the following core courses:

  - COP 4313 Symbolic Computations in Mathematics (3)
  - MAA 4211 Intermediate Analysis I (4)
  - MAC 2311 Calculus I (4)
  - MAC 2312 Calculus II (4)
  - MAC 2313 Calculus III (4)
  - MAP 2302 Differential Equations (3)
  - MAS 3105 Linear Algebra (3)
  - MAS 4301 Elementary Abstract Algebra (3)
  - MAT 2936 Technology Seminar (1)
  - MAT 4937 Mathematics Majors Seminar (1)
  - MGF 3301 Bridge to Abstract Mathematics (3)
  - STA 4442 Introduction to Probability (3)

  In addition, majors must complete three (3) courses from the following electives:

  - CGS 3422 Problem Solving Using Pascal or C (3)
  - MAA 4212 Intermediate Analysis II (3)
  - MAA 4402 Complex Variables (3)
  - MAD 4401 Numerical Analysis (4)
  - MAD 4504 Theory of Computation (3)
  - MAD 5305 Introduction to Graph Theory (3)
  - MAP 5345 Applied Partial Differential Equations (3)
  - MAP 5407 Methods of Applied Mathematics (3)
  - MAS 4124 Numerical Linear Algebra (3)
  - MAS 4156 Vector Calculus (3)
  - MAS 4214 Elementary Number Theory (3)
  - MGF 5405 History of Modern Mathematics (3)
  - MTG 4212 Geometry (4)
  - MTG 4302 Introduction to Topology (3)
  - STA 4321 Introduction to Statistics (3)
  - STA 5166 Computational Statistics (3)
  - STA 5228 Sampling Techniques (3)

  Special topics courses, listed under MAT 4930, or other 5000-level mathematics courses can also be taken as electives, with the approval of an undergraduate advisor. In addition, one elective of high mathematical content can be taken from another department, with the approval of an undergraduate advisor and the chairman.

  An undergraduate advisor will work with the student in recommending electives which are appropriate for the student’s interests and goals.
Mathematics-related Courses (6-8 cr. hrs.)
Majors, except for majors in mathematics for teaching, must take two courses with laboratories in the Departments of Biology, Chemistry, Geology, or Physics that are required courses for the major within those departments.
Majors will not receive credit toward graduation for the following courses:
- AST 3033 Contemporary Thinking in Astronomy
- QMB 2100 Business and Economic Statistics I
- QMB 3200 Business and Economic Statistics II
- PHY 2020 Conceptual Physics
- STA 2023 Introductory Statistics I
- STA 2122 Social Science Statistics

Majors wishing to take a course in statistics should take STA 4321 Introduction to Statistics.