

MATHEMATICS (B.S.)

The Bachelor of Science (B.S.) in Mathematics provides a more intensive exposure to the technical aspects of the discipline and provides opportunities for students to develop general analytical and problem-solving skills and gain specific, in-depth knowledge in certain areas of mathematics. Students will be prepared for graduate study in mathematics, science, or engineering.

Program Progression and Additional Graduation Requirements

- Attend an orientation session.
- Sign an Advising Agreement document.

In addition to the program requirements, students must:

- Complete a minimum of 120 credits.
- Complete a minimum of 48 of the 120 credits at the upper division (3000-4999 level).
- Earn a cumulative GPA of 2.0 for all coursework attempted at FGCU.
- Satisfy the College-Level Skills and foreign language entrance requirements.
- Satisfy the Service-Learning requirement.
- Satisfy the Civic Literacy requirement.
- Satisfy the residency requirement: 30 of the last 60 credits must be completed at FGCU.
- Complete the summer course enrollment requirement.
- Submit an Application for Graduation by the deadline listed in the FGCU Academic Calendar.

Program Requirements

Code	Title	Credits
FGCU General Education Program (https://www.fgcu.edu/academics/undergraduatestudies/generaleducation/)		
To prevent or minimize excess hours, select general education courses that satisfy common prerequisite requirements for your intended major.		
Common Prerequisites		
For this major, common prerequisite courses with an asterisk (*) require prior knowledge and skills demonstrated through degree acceleration programs (e.g., the College Board's Advanced Placement Program [AP], International Baccalaureate Program [IB], College-Level Examination Program [CLEP], Advanced International Certificate of Education Program [AICE]); dual enrollment; placement exam; or college coursework.		
A minimum grade of C is required in each course		
COP 1500	Intro to Computer Science (Acceptable Substitute: COPX001 or COPX006 or COPX210 or COPX270 or COPX271C or COPX272C or COPX500) ^{*, 1}	3
or COP 2001	Programming Methodology	
or COP 2006	Programming I	
MAC 2311	Calculus I (Acceptable Substitute: MACX311) ^{*, 2}	4
MAC 2312	Calculus II (Acceptable Substitute: MACX312)	4
MAC 2313	Calculus III (Acceptable Substitute: MACX313)	4
MAP 2302	Differential Equations (Acceptable Substitute: MAPX302)	3

PHY 2048 & 2048L	General Physics I and General Physics I Laboratory (Acceptable Substitute: BSCX010C or (BSCX010 and BSCX010L) or CHMX045C or (CHMX045 and CHMX045L) or PHYX048C or (PHYX048 and PHYX048L) or GLYX010C or (GLYX010 and GLYX010L))	4
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Required Courses in the Major (36 credits)

A minimum grade of C is required in each course

MAA 4226	Analysis I	3
MAA 4227	Analysis II	3
MAP 3161	Math for Science & Engineering	4
MAP 3162	Probability & Statistics	4
MAP 3163	Operations Research I	3
MAS 3105	Linear Algebra	3
MAS 4301	Abstract Algebra I	3
MAS 4302	Abstract Algebra II	3
MAS 4730	Computational Technology	2
MAT 4937	Senior Seminar (capstone)	2
MHF 4404	History of Mathematics	3
MHF 2191	Mathematical Foundations	3

Restricted Electives in the Major (6 credits)

A minimum grade of C is required in each course

Select 6 upper division (3000-4999 level) credits from the following prefixes: MAA, MAD (except MAD X107), MAP, MAS, MAT, MHF, MTG, or STA

Sustainability Course Graduation Requirement (3 credits)

Select at least 3 credits in sustainability coursework (SCGR Attribute)

Additional Electives

As needed to reach total credits required for the degree

¹ Prerequisites of MAT 1033 Intermediate Algebra minimum grade of C then MAC 1105 College Algebra minimum grade of C; or relevant accelerated credit; or placement exam

² Prerequisites of MAT 1033 Intermediate Algebra minimum grade of C then MAC 1105 College Algebra minimum grade of C then MAC 1147 Precalculus minimum grade of C; or relevant accelerated credit; or placement exam

Total Credits Required: 120