

BACHELOR OF ARTS, MAJOR IN MATHEMATICS

Bachelor of Arts, Major in Mathematics

Core Curriculum (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum)

Component Area I (Communication)	6
Component Area II (Mathematics)	3
Component Area III (Life and Physical Science)	8
Component Area IV (Language, Philosophy, and Culture)	3
Component Area V (Creative Arts)	3
Component Area VI (U.S. History)	6
Component Area VII (Political Science/Government)	6
Component Area VIII (Social and Behavioral Sciences)	3
Component Area IX (Component Area Option)	4

Degree Specific Requirements

FOLG 1411 & FOLG 1412 & FOLG 2311 & FOLG 2312	Beginning Foreign Language I and Beginning Foreign Language II and Intermediate Foreign Language and Intermed Foreign Language II ¹	14
PHYS 1411 or PHYS 1422	Introduction To Physics I Introduction To Physics II	4
PHIL 2303	Critical Thinking ²	3
COSC 1436	Programming Fundamentals I	4
ENGL 2332	Wrld Lit I: Before 17 Century ³	3
Science Courses for Science Majors from Component Area III list		8

Major Core

MATH 1420	Calculus I ³	4
MATH 1430	Calculus II	4
MATH 2440	Calculus III	4
MATH 3300	Introduction To Math Thought	3
MATH 3377	Intro To Linear Alg & Matrics	3
MATH 4361	Introductory Analysis	3
MATH 4366	Elementary Analysis	3
MATH 4371	Thry & Appl Of Prob & Stat I	3
MATH 4377	Algebraic Structures	3

Major

MATH electives	9
Minor	18
Electives (To bring to 120 total hrs)	6

Total Hours 120

¹ FOLG 2311 satisfies Component Area IV.

² PHIL 2303 satisfies Component Area VIII.

³ ENGL 2332 satisfies three hours of Component Area IX.

⁴ MATH 1420 satisfies Component Area II and one hour of Component Area IX.

The following courses can only be used as required advanced electives by students who are seeking elementary/middle school teacher certification:

Required Advanced Electives: Elementary/Middle School Teacher Certification

MATH 3380	Historical Perspec of Math	3
MATH 3381	Intro - Foundation Of Math III	3
MATH 3383	Geometric Meas./Transformation	3
MATH 3384	Foundations Of Mathematics	3
MATH 3386	Fundmtls Probability/Stats	3

MATH 3387	Problem Solving-Middle Sch Mth	3
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The following courses can only be used as required advanced electives by students who are seeking secondary teacher certification:

Required Advanced Electives: Secondary Teacher Certification

MATH 4384	Survey Of Mathematical Ideas	3
MATH 4385	Mathematical Problem Solving	3

Students should use the minor and advanced general electives to complete the 42-advanced hour requirement for graduation.

In order to satisfy Component Area 3 (Natural Science, Not in Department of Physics), the student must take classes from the following:

Courses for Science Majors

Course Requirements

BIOL 1411	General Botany	4
BIOL 1413	General Zoology	4
BIOL 2401	Human Anatomy	4
CHEM 1411	General Chemistry I	4
CHEM 1412	General Chemistry II	4

Any lab course from Geology or Geography

First Year

Fall	Hours Spring	Hours
MATH 1420 ¹	4 MATH 1430	4
Component Area III (Science Course for Science Major)	4 HIST 1302 ³	3
ENGL 1301 ²	3 ENGL 1302 ²	3
HIST 1301 ³	3 Component Area III (Science Course for Science Majors)	4
	14	14

Second Year

Fall	Hours Spring	Hours
MATH 2440	4 MATH 3377	3
MATH 3300	3 FOLG 1412	4
POLS 2305 ⁴	3 Class for minor	3
FOLG 1411	4 POLS 2306 ⁴	3
PHYS 1411 or 1422	4 PHIL 2303 ⁵	3
	18	16

Third Year

Fall	Hours Spring	Hours
MATH 4361	3 Advanced MATH elective	3
MATH 4371	3 Class for minor	3
FOLG 2311 ⁶	3 COSC 1436	4
Class for minor	3 FOLG 2312	3
ENGL 2332 ⁷	3 MATH 4366	3
	15	16

Fourth Year

Fall	Hours Spring	Hours
MATH 4377	3 Advanced MATH elective	3
Class for minor	3 Elective	3
Advanced MATH elective	3 Class for minor	3
Component Area V (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav)	3 Class for minor	3

Elective	3	
	15	12

Total Hours: 120

- 1 Satisfies Component Area II and one hour of Component Area IX.
- 2 Satisfies Component Area I.
- 3 Satisfies Component Area VI.
- 4 Satisfies Component Area VII.
- 5 Satisfies Component Area VIII.
- 6 Satisfies Component Area IV.
- 7 Satisfies Component Area IX.