

BACHELOR OF SCIENCE, MAJOR IN MATHEMATICS WITH TEACHER CERTIFICATION

For Students Selecting a Minor as a Second Teaching Field

The requirements include:

| | | |
|-------------|--------------------------------|----|
| MATH 1420 | Calculus I | 4 |
| MATH 1430 | Calculus II | 4 |
| MATH 2440 | Calculus III | 4 |
| MATH 3363 | Euclidean Geometry | 3 |
| MATH 3300 | Introduction To Math Thought | 3 |
| MATH 3377 | Intro To Linear Alg & Matrics | 3 |
| MATH 3379 | Statistical Mthods In Practice | 3 |
| MATH 4377 | Algebraic Structures | 3 |
| MATH 4384 | Survey Of Mathematical Ideas | 3 |
| MATH 4367 | The Evolution Of Mathematics | 3 |
| MATH 4385 | Mathematical Problem Solving | 3 |
| Total Hours | | 36 |

For Students Who do not Select a Minor

| | | |
|--------------------------------------|--------------------------------|---|
| MATH 1420 | Calculus I | 4 |
| MATH 1430 | Calculus II | 4 |
| MATH 2440 | Calculus III | 4 |
| MATH 3363 | Euclidean Geometry | 3 |
| MATH 3300 | Introduction To Math Thought | 3 |
| MATH 3377 | Intro To Linear Alg & Matrics | 3 |
| MATH 3379 | Statistical Mthods In Practice | 3 |
| MATH 4377 | Algebraic Structures | 3 |
| MATH 4367 | The Evolution Of Mathematics | 3 |
| MATH 4384 | Survey Of Mathematical Ideas | 3 |
| MATH 4385 | Mathematical Problem Solving | 3 |
| Select one of the following options: | | 6 |

OPTION 1: (Analysis Emphasis)

MATH 4361 Introductory Analysis

An advanced MATH course

OPTION 2: (Statistics Emphasis)

MATH/STAT 4371 Thry & Appl Of Prob & Stat I

An advanced STAT course

| | | |
|-------------|--|----|
| Total Hours | | 42 |
|-------------|--|----|

Bachelor of Science, Major in Mathematics with Teacher Certification

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

| | | |
|--|---|-----|
| Science Courses for Science Majors - Select 8 hours from the following: ¹ | | 8 |
| BIOL 1411 & BIOL 1413 | General Botany and General Zoology | |
| CHEM 1411 & CHEM 1412 | General Chemistry I and General Chemistry II | |
| 8 hours from GEOL 1403, GEOL 1404, GEOL 1405, GEOG 1401 | | |
| COSC 1436 | Programming Fundamentals I | 4 |
| ENGL 2332 | Wrld Lit I: Before 17 Century ² | 3 |
| PHYS 1411 & PHYS 1422 or PHYS 2426 | Introduction To Physics I and Introduction To Physics II Heat, Waves & Modern Physics | 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 3363 | Euclidean Geometry | 3 |
| MATH 3377 | Intro To Linear Alg & Matrics | 3 |
| MATH 3379 | Statistical Mthods In Practice | 3 |
| MATH 4377 | Algebraic Structures | 3 |
| MATH 4367 | The Evolution Of Mathematics | 3 |
| MATH 4384 | Survey Of Mathematical Ideas | 3 |
| MATH 4385 | Mathematical Problem Solving | 3 |
| Major | | |
| Select one of the following Options: | | 6 |
| Option 1: | | |
| MATH 4361 | Introductory Analysis | |
| An Advanced MATH elective | | |
| Option 2: | | |
| STAT 4371 | Thry & Appl Of Prob & Stat I | |
| An advanced STAT elective | | |
| Minor | | |
| CISE 3384 | The Teaching Profession (Junior) | 3 |
| CISE 4364 | Mth Tch Secondary Schools (Senior) | 3 |
| CISE 4377 | Assmt Stdnt Lrng In Secondary (Senior) | 3 |
| CISE 4378 | Content Literacy | 3 |
| CISE 4380 | Respon Of Pro Educator | 3 |
| CISE 4394 | Creatng Env For Lrng-Secondary (Senior) | 3 |
| CISE 4396 | Std Tch Secondary Classroom (Senior) | 3 |
| CISE 4397 | Std Tch Secondary Classroom (Senior) | 3 |
| MATH Elective | | 6 |
| Elective | | 1 |
| Total Hours | | 123 |

¹ Satisfies Core Curriculum requirement for Component Area III (Life and Physical Science).

² ENGL 2332 satisfies both Core Curriculum for Component Area IV as well as B.S. degree-specific requirements.

³ Satisfies Core Curriculum requirement for Component Area II (Mathematics) and one semester credit hour of the Core Curriculum requirement for Component Area IX (Component Area Option).

First Year

| Fall | Hours Spring | Hours |
|---|---|-------|
| Component Area III - Science Course for Science Major | 4 Component Area III - Science Course for Science Major | 4 |

| | | |
|--|--|--------------|
| Component Area IV (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiV) | 3 Component Area V (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav) | 3 |
| COSC 1436 | 4 ENGL 1302 ¹ | 3 |
| ENGL 1301 ¹ | 3 MATH 1430 | 4 |
| MATH 1420 ² | 4 MATH 3379 | 3 |
| | 18 | 17 |
| Second Year | | |
| Fall | Hours Spring | Hours |
| HIST 1301 ³ | 3 HIST 1302 ³ | 3 |
| MATH 2440 | 4 MATH 3363 | 3 |
| MATH 3300 | 3 MATH 3377 | 3 |
| PHYS 1411 | 4 PHYS 1422 or 2426 | 4 |
| POLS 2305 ⁴ | 3 POLS 2306 ⁴ | 3 |
| | 17 | 16 |
| Third Year | | |
| Fall | Hours Spring | Hours |
| Component Area VIII (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii) | 3 CISE 3384 | 3 |
| MATH 4367 | 3 ENGL 2332 ⁵ | 3 |
| MATH 4377 | 3 Elective | 1 |
| MATH 4384 | 3 MATH 4385 | 3 |
| MATH elective | 3 MATH elective | 3 |
| Option 1 or 2 | 3 Option 1 or 2 (3 additional hours from same option) | 3 |
| | 18 | 16 |
| Fourth Year | | |
| Fall | Hours Spring | Hours |
| CISE 4364 | 3 CISE 4377 | 3 |
| CISE 4378 | 3 CISE 4396 | 3 |
| CISE 4380 | 3 CISE 4397 | 3 |
| CISE 4394 | 3 | |
| | 12 | 9 |

Total Hours: 123

- ¹ Satisfies Core Curriculum requirement for Component Area I (Communications).
- ² Satisfies Core Curriculum requirement for Component Area II (Mathematics) and one semester credit hour of Component Area IX (Component Area Option).
- ³ Satisfies Core Curriculum requirement for Component Area VI (U.S. History).
- ⁴ Satisfies Core Curriculum requirement for Component Area VII (Political Science).
- ⁵ Satisfies Core Curriculum requirement for Component Area IX (Component Area Option).