

# MATHEMATICS | BACHELOR OF ARTS: MATHEMATICS (TEACHING)

## Program Summary

| Code   | Title | Hours      |
|--|-------|------------|
| General Education Courses                            |       | 34         |
| Bachelor of Arts Language Requirement                |       | 10         |
| Major Courses  |       | 44         |
| Cognate Courses                                      |       | 5          |
| Directed Electives                                   |       | 3          |
| Open Electives                                       |       | 24         |
| <b>Total Credit Hours Required for BA - Math</b>     |       | <b>120</b> |
| Additional Credit Hours Needed for Teacher Education |       |            |
| Teacher Education Requirements                       |       | 31         |

<sup>1</sup> Open electives are the credit hours required to reach a minimum of 120 total hours and 45 upper-level hours. The number listed assumes all courses are completed at FHSU as listed. This number may vary if students transfer courses, or have individual substitutions allowed.

Students should speak with their advisor if either situation applies to determine if the number will vary, and to ensure they enroll in a minimum of 45 upper-level hours.

Students entering within 1 year of high school graduation will take UNIV 101 Freshman Seminar and may apply that hour in the open elective category.

## Program Requirements

### General Education

All undergraduate degrees require completion of the Kansas Systemwide General Education (<https://catalog.fhsu.edu/general-education/>).

Courses identified with <sup>GE</sup> on this page may satisfy a general education requirement in addition to the identified degree requirement. Students who apply a degree requirement to satisfy a general education requirement will typically add an equal number of hours to the the university elective category. This flexibility may allow you to complete a minor or certificate within the 120 hour degree. Transfer students and students majoring in programs with approved exceptions (<https://www.fhsu.edu/general-education/documents/fhsu-gen-ed-transfer-exceptions-explainer1.pdf>) are especially encouraged to select these courses in completing General Education requirements to maximize the likelihood of completing the degree with 120 credit hours.

| Code              | Title | Hours |
|-------------------|-------|-------|
| General Education |       | 34-35 |

### BA Language Requirement

All FHSU students pursuing a BA degree are required to take two consecutive non-English language classes. Students taking beginning Spanish or French classes may be able to apply the first class to the Arts and Humanities area of the general education requirement.

| Code   | Title  | Hours     |
|--|--|-----------|
| <b>Bachelor of Arts Language Requirement</b> |  | <b>10</b> |
| <b>Major Courses</b>                         |  |           |
| CSCI 121                                     | Computer Science I                             | 3         |
| MATH 234                                     | Analytic Geometry and Calculus I <sup>GE</sup> | 5         |
| MATH 235                                     | Analytic Geometry and Calculus II              | 5         |
| MATH 236                                     | Analytic Geometry and Calculus III             | 3         |
| MATH 240                                     | Linear Algebra                                 | 3         |
| MATH 250                                     | Elements of Statistics <sup>GE</sup>           | 3         |
| MATH 277                                     | Early Field Experience: Mathematics Education  | 1         |
| MATH 278                                     | Apprenticeship-Mathematics                     | 2         |
| MATH 301                                     | Introduction to Proof                          | 3         |
| MATH 350                                     | Mathematical Statistics                        | 3         |
| MATH 370                                     | History of Mathematics                         | 3         |
| MATH 381                                     | Teaching of Secondary School Mathematics       | 3         |
| MATH 610                                     | Higher Algebra                                 | 3         |
| MATH 620                                     | Modern Geometry                                | 3         |
| MATH 675                                     | Seminar in Mathematics                         | 1         |
| MATH 300+                                    | Select one 300+ level Mathematics elective     | 3         |
| <b>Cognate Courses</b>                       |  |           |
| PHYS 211                                     | Engineering Physics I <sup>GE</sup>            | 4         |
| PHYS 211L                                    | Engineering Physics I Laboratory <sup>GE</sup> | 1         |
| <b>Total Hours</b>                           |  | <b>52</b> |

The Bachelor of Science in Education with a emphasis in Secondary Education is available only as part of a dual major in conjunction with a major in an academic teaching field approved by the KSDE at the PreK-12 and 6-12 levels. The teaching fields available at FHSU for students interested in licensure at middle or high school levels are art, biology, business, chemistry, earth/space science, English, modern languages (Spanish), journalism, mathematics, music, physical education, physics, psychology, technology education (communications; power, energy, transportation; production), history and government. For requirements in each content, please contact the appropriate teaching area departmental office. Students wishing to complete the requirements for the Secondary Education major must also meet the Teacher Education Program admission requirements. This program follows the Conceptual Framework for Teacher Education at Fort Hays State University.

| Code  | Title | Hours    |
|---|-------|----------|
| Secondary Education Core  |       | 19       |
| Courses from field of study   |       | variable |
| Student Teaching  |       | 12       |
| <b>Total number of credit hours varies based on chosen field of study</b> |       |          |

### General Education

All undergraduate degrees require completion of the Kansas Systemwide General Education (<https://catalog.fhsu.edu/general-education/>).

Courses identified with <sup>GE</sup> on this page may satisfy a general education requirement in addition to the identified degree requirement. Students

who apply a degree requirement to satisfy a general education requirement will typically add an equal number of hours to the the university elective category. This flexibility may allow you to complete a minor or certificate within the 120 hour degree. Transfer students and students majoring in programs with approved exceptions (<https://www.fhsu.edu/general-education/documents/fhsu-gen-ed-transfer-exceptions-explainer1.pdf>) are especially encouraged to select these courses in completing General Education requirements to maximize the likelihood of completing the degree with 120 credit hours.

| Code                     | Title | Hours        |
|--------------------------|-------|--------------|
| <b>General Education</b> |       | <b>34-35</b> |

## Program Admission Requirements & General Education Courses

To earn an undergraduate degree at FHSU, you must complete 34 hours of General Education coursework. For the Secondary Education degree the following classes typically applied to the general education requirements must be completed with the specified grade for admission to the teacher education program, these include:

| Code        | Title  | Hours |
|-------------|--|-------|
| ENG 101     | English Composition I (Grade C) <sup>GE</sup>              | 3     |
| ENG 102     | English Composition II (Grade B) <sup>GE</sup>             | 3     |
| COMM 100    | Fundamentals of Oral Communication (Grade B) <sup>GE</sup> | 3     |
| or COMM 304 | Intermediate Interpersonal Communication                   |       |
| MATH 110    | College Algebra (Grade C) <sup>GE</sup>                    | 3     |
| or MATH 101 | Contemporary Mathematics                                   |       |
| or MATH 130 | Pre-Calculus Mathematics                                   |       |
| or MATH 234 | Analytic Geometry and Calculus I                           |       |
| MATH 250    | Elements of Statistics (Grade C) <sup>GE</sup>             | 3     |

For a current list of all teacher education admission requirements check out the programs website (<https://www.fhsu.edu/cert/admission-to-teacher-education/>)

## Secondary Education Requirements

These requirements are in addition to the requirements for the primary degree

| Code   | Title  | Hours |
|--|--|-------|
| <b>Secondary Education Core Non-Restricted Courses</b>                                       |  |       |
| TEEL 202   | Foundations of Education (Grade C)                   | 3     |
| TEEL 231   | Human Growth and Development (Grade C) <sup>GE</sup> | 3     |
| TECS 301   | Introduction to Instructional Technology (Grade C)   | 3     |
| ___ 277  | Early Field Experience (Grade C)                     |       |
| <b>Secondary Education Core Restricted Courses (Admission to Teacher Education Required)</b> |  |       |
| TESP 302   | Educating Students with Exceptionalities             | 3     |
| TEEL 431   | Educational Psychology                               | 3     |
| TESS 494   | The Secondary School Experience                      | 4     |
| <b>Student Teaching Courses</b>  |  |       |

|          |                            |    |
|----------|----------------------------|----|
| TESS 496 | Student Teaching Secondary | 11 |
| TEEL 675 | Seminar in Education I     | 1  |

Total Secondary Education Courses: 31 Credit Hours. The 31 credit hours doesn't include method classes in the discipline or additional cognates necessary for specific fields.

- All program courses must be completed with a C or better
- Major requires 2.75 GPA

## Degree Requirements

| Code | Title | Hours |
|------|-------|-------|
|------|-------|-------|

**All bachelor degrees require:**

GPA of 2.0 on FHSU courses & 2.0 on all coursework (Higher program requirements prevail over the 2.0 when set)

A minimum of 30 hours earned from FHSU with a grade of D, C, B, or A

Successful completion of an upper division Writing and Information Literacy course (Most majors contain a course designated)

A minimum of 45 hours of recognized upper division credit

A minimum of 120 hours of recognized college credit

## Degree Requirements

| Code | Title | Hours |
|------|-------|-------|
|------|-------|-------|

**Bachelor of Arts Degree Language Requirement**

Two consecutive semesters of a non-English Language

**All bachelor degrees require:**

GPA of 2.0 on FHSU courses & 2.0 on all coursework (Higher program requirements prevail over the 2.0 when set)

A minimum of 30 hours earned from FHSU with a grade of D, C, B, or A

Successful completion of an upper division Writing and Information Literacy course (Most majors contain a course designated)

A minimum of 45 hours of recognized upper division credit

A minimum of 120 hours of recognized college credit