# Mathematics, B.S.Ed.

## Major in Mathematics, BSE

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credits Required for Major</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum Residency 50% of Major Courses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum GPA 2.0 for Major</td>
<td></td>
</tr>
</tbody>
</table>

## REQUIRED MATHEMATICS COURSES

A grade of C- or higher is required in all required math courses, except MATH 464.

- **Calculus I - Choose 1 of the following:**
  - MATH 161 Calculus 1
  - MATH 163H Honors Calculus 1
  - MATH 211 Calculus 2
  - MATH 301 History of Mathematics
  - MATH 305 Teaching Math in Secondary Schools 1
  - MATH 310 Intro to Mathematical Proof
  - MATH 311 Calculus 3
  - MATH 322 Linear Algebra 1
  - MATH 325 Mathematical Connections
  - MATH 345 Abstract Algebra 1
  - MATH 354 Classical and Transformational Geometry
  - MATH 405 Teaching Math in Secondary Schools 2
  - MATH 464 Real Analysis 1

## REQUIREMENTS FOR NO OPTION DECLARED

- **STATISTICS REQUIREMENT - Choose 1 of the following options 1-2:**
  - MATH 333 Probability and Statistics
  - Option 2. Math Statistics I (C- or Better) and Statistics II (C- or Better)

## Total Hours

**47-50**

## Professional Education

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credits Required for Major</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum Residency 50% of Major Courses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum GPA 2.0 for Major</td>
<td></td>
</tr>
</tbody>
</table>

## EDUCATIONAL FOUNDATIONS

- EDFN 211 Foundations Modern Education
- EDFN 241 Psychological Foundations of Teaching

## REQUIRED EDUCATION COURSES

- EDSE 321 Issues in Secondary Education

## ACCOMMODATIONS AND ADAPTATIONS

- EDSE 340 Content Area Literacy for Diverse Classrooms
- SPED 346 Secondary Students w/Disabilities in Inclusive Settings

## STUDENT TEACHING

- EDSE 471 Student Teaching Seminar
- Student Teaching
- EDM 461 Student Teaching in Math

## Total Hours

**27**

## Req Related for Mathematics, BSE

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credits Required for Major</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum Residency 50% of Major Courses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum GPA 2.0 for Major</td>
<td></td>
</tr>
</tbody>
</table>

## REQUIRED RELATED COURSES

- CSCI 161 Introduction to Programming 1
- CSCI 140 Discrete Structures

## Total Hours

**8**

## Advanced Professional Studies, BSE

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credits Required for Major</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum Residency 50% of Major Courses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum GPA 2.0 for Major</td>
<td></td>
</tr>
</tbody>
</table>

## APS REQUIREMENTS

- English Composition - Choose 1 of the following:
  - ENGL 110 Intro to College Writing
  - ENGL 110H Hnrs: Intro to College Writing

- English Literature - Choose 1 of the following:
  - ENGL 230 Introduction to Literature
  - ENGL 231 World Literature 1
  - ENGL 232 World Literature 2
  - ENGL 233 Early British Literature
  - ENGL 234 Later British Literature
  - ENGL 235 American Literary Tradition I
ENGL 236  American Literary Tradition II
ENGL 241H H: Explorations in World Lit
ENGL 242  Reading Our World:
ENGL 292  Science Fiction
ENGL 333  African-American Literature 1
ENGL 333H H: Explorations in World Lit 1
ENGL 334  African American Literature 2
ENGL 334H H: Explorations in World Lit 2
ENGL 336  New Dimensions to World Lit
ENGL 338  Folklore and Literature
ENGL 401  Old Eng Lang and Literature
ENGL 402  Middle Eng Lang and Literature

**Mathematics**

Two Mathematics courses are required for BSE students. You have taken 0 course(s). It is preferable to take two courses designated as G2. Click here to search for MATH courses on the current web schedule. BIOL 375 will fulfill one Mathematics course for BSE BIOL students.

EDFN 211  Foundations Modern Education
& EDFN 241  Psychological Foundations of Teaching

6 earned (transcript) credit hours are required

**APS registration status**

You ARE NOT eligible to register for courses requiring APS status.

**Pre-Service Testing Required**

Pre-Service Testing Status is indicated by one of the following: 1.) PSTA - Pre-Service Testing Accomplished: Verified passing pre-service test scores meet the requirement. 2.) PSTI - Pre-Service Testing Incomplete: Non-passing pre-service test scores were submitted prior to the August 1, 2015 policy change. Passing scores must still be achieved in order to meet the PA certification requirements. 3.) PSTU - Pre-Service Testing Unverified: Unofficial copies of pre-service test scores were submitted. Official scores must be sent from the testing company in order to meet PA certification requirements. 4.) PSTX - Pre-Service Testing Waived: Per PDE - ACT 136, the Pre-Service Testing Requirement has been waived.

Pre-Service Testing Status is indicated by one of the following: 1.) PSTA - Pre-Service Testing Accomplished: Verified passing pre-service test scores meet the requirement. 2.) PSTI - Pre-Service Testing Incomplete: Non-passing pre-service test scores were submitted prior to the August 1, 2015 policy change. Passing scores must still be achieved in order to meet the PA certification requirements. 3.) PSTU - Pre-Service Testing Unverified: Unofficial copies of pre-service test scores were submitted. Official scores must be sent from the testing company in order to meet PA certification requirements. 4.) PSTX - Pre-Service Testing Waived: Per PDE - ACT 136, the Pre-Service Testing Requirement has been waived.

**Your GPA is below 3.0 - please see an advisor**

If you are given the 2.8 GPA Exception for graduation and you graduate with a GPA lower than 3.0, you must have higher certification test scores in order to meet PA state certification requirements.

**No dispositions-related holds**