## MATHEMATICS, B.S.ED.

The Bachelor of Science in Education for Mathematics Majors provides training in Secondary Mathematics Education and is the degree program for prospective teachers of mathematics in secondary schools. Students receive thorough mathematical content knowledge and pedagogical training to prepare them to teach. In order to graduate in 4 years, students in the B.S.E. program must complete all their academic coursework in 7 semesters, as their final semester is spent in a full-time student teaching field placement. Successful graduates will be certified to teach mathematics in grades 7 through 12 in Pennsylvania and can easily transfer this certification to any state.

## Major in Mathematics, BSE



| MATH 370 | Operations Research |
| :--- | :--- |
| MATH 372 | Financial Mathematics I |
| MATH 375 | Numerical Analysis |
| MATH 393 | Number Theory |
| MATH 395 | Introduction Combinatorics |
| MATH 422 | Linear Algebra 2 |
| MATH 445 | Abstract Algebra 2 |
| MATH 457 | Elementary Differentl Geometry |
| MATH 465 | Real Analysis 2 |
| MATH 467 | Partial Differential Equations |
| MATH 471 | Mathematical Modeling |
| MATH 472 | Financial Mathematics II |
| MATH 483 | Point-Set Topology |
| Any 4@8 MATH course(s) |  |
| MATH 498 | Independent Study |
| MATH 535 | Statistical Methods 1 |
| MATH 536 | Statistical Methods 2 |
| MATH 566 | Complex Variables |
| MATH 577 | Problems in Applied Math |
| MATH 592 | Graph Theory |

Total Hours

## Professional Education

Code Title Hours

EDUCATIONAL FOUNDATIONS
EDFN 211 Foundations Modern Education 3
EDFN 241 Psychological Foundations of Teaching 3

REQUIRED EDUCATION COURSES
EDSE 321 Issues in Secondary Education 3
ACCOMMODATIONS AND ADAPTATIONS

| EDSE 340 | Content Area Literacy for Diverse Classrooms | 3 |
| :--- | :--- | :--- |
| SPED 346 | Secondary Students w/Disabilities in Inclusive <br> Settings | 3 |

STUDENT TEACHING
EDSE 471 Student Teaching Seminar 3
EDMA 461 Student Teaching in Math 9

Total Hours ..... 27
Req Related for Mathematics, BSE

| Code | Title | Hours |
| :--- | :--- | ---: |
| REQUIRED RELATED COURSES |  |  |
| CSCI 161 | Introduction to Programming 1 | 4 |
| CSCI 140 | Discrete Structures | $\mathbf{4}$ |
| Total Hours |  | $\mathbf{8}$ |

## Advanced Professional Studies, BSE

## APS REQUIREMENTS

English Composition - Choose 1 of the following:

| ENGL 110H | Hnrs:English Composition |
| :--- | :--- |
| 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 | Hnrs:African American Lit 1 |
| ENGL 334 | African American Literature 2 |
| ENGL 334H | Hnrs:African American 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 6
\& EDFN 241 and Psychological Foundations of Teaching
48 earned (transcript) credit hours are required
APS registration status
You ARE NOT eligible to register for courses requiring APS status.
ACT 126 - Educator Ethics Training
You must submit your Educator Ethics Training.

## Pre-Service Testing Required

Pre-Service Testing Status is indicated by one of the following: 1.) PSTA - Pre-Service Testing Accomplished: Verified passing preservice 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.

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## 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

If the requirement above is checked as complete, then there are currently no dispositions-related holds on your APS Status. Registration for APS courses is permitted when all APS requirements have been met. If it is incomplete, you have a hold and APS registration will not be allowed.

## Full Admission to APS

When all requirements are met, you must submit application for admission to APS status. Click here for the application.

## Total Hours

