# Secondary Education/Mathematics Education

Learn more about the Bachelor of Science in Education in Secondary Education / Mathematics Education (https://www.temple.edu/academics/degree-programs/secondary-education-math-education-major-ed-seme-bsed).

Students seeking certification in Secondary Education: Mathematics **must** complete the requirements for **both** the major in Secondary Education: Mathematics **AND** for the Mathematics (B.A.) major as specified by the College of Science and Technology. The eight semester plan that appears in the Academic Plan tab is inclusive of all requirements for both the Secondary Education: Mathematics major housed in the College of Education **AND** for the Mathematics B.A. (http://bulletin.temple.edu/undergraduate/science-technology/mathematics/ba-mathematics) housed in the College of Science and Technology (CST). Students entering this major must declare the second major of Mathematics through CST.

## Summary of Requirements

### University Requirements

All students are required to complete the university's General Education (GenEd (http://bulletin.temple.edu/undergraduate/general-education)) curriculum.

All students (including transfer students) must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

### College Requirements

Students receive a Bachelor of Science in Education degree by meeting the following minimum College requirements:

- Completion of program requirements as detailed on the academic plan.
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
- Earn minimum grades required by CST in all Mathematics courses.
- Students in Secondary Education must maintain a 3.0 cumulative GPA and a 2.0 GPA in their content area courses.

For additional college and certification requirements, refer to the College Requirements page (http://bulletin.temple.edu/undergraduate/education/#requirementstext).

### Major Requirements

| Code | Title | Credit Hours |
|---|---|---|
| EDUC 1255 | Inclusive Education for a Diverse Society | 3 |
| EDUC 2103 | Socio-cultural Foundations of Education in the United States [1] | 3 |
| EDUC 2109 | Adolescent Development for Educators [1] | 3 |
| EDUC 2296 | Effective Teaching: Theory and Practice | 3 |
| SPED 2231 | Introduction to Inclusive Education [1] | 3 |
| EDUC 2255 | Effective Use of Instructional Technology in Classrooms | 3 |
| EDUC 2306 | Assessment and Evaluation | 3 |
| ENES 3338 | Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 | 3 |
| SECE 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 | 3 |
| EDUC 4111 | Classroom and Conflict Management in Grades 4 through 12 | 3 |
| SECE 4801 | Senior Seminar and Performance Assessment in Secondary Education | 3 |
| SECE 4688 | Student Teaching in Secondary Education | 9 |
| Total Credit Hours | | 42 |

[1] Course required for candidacy.

### Program Requirements for Secondary Education / Mathematics Education

| Code | Title | Credit Hours |
|---|---|---|
| MAES 3145 | Teaching & Learning Mathematics in the Middle Grades | 3 |
| MAES 4146 | Teaching and Learning Mathematics in High School | 3 |

| | | |
|---|---|---|
| MAES 4371 | History of Mathematics | 3 |
| EDUC 4389 | Field Experience | 1 |
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| Total Credit Hours | | 11 |

## Academic Content Area for Mathematics

| Code | Title | Credit Hours |
|---|---|---|
| MATH 1041 | Calculus I | 4 |
| MATH 1042 | Calculus II | 4 |
| MATH 2043 | Calculus III | 4 |
| MATH 2101 | Linear Algebra | 3 |
| or MATH 2103 | Linear Algebra with Computer Lab | |
| MATH 2111 | Basic Concepts of Math | 3 |
| MATH 3003 | Theory of Numbers | 3 |
| MATH 3031 | Probability Theory I | 3 |
| MATH 3032 | Mathematical Statistics | 3 |
| MATH 3061 | Modern Geometry I | 3 |
| MATH 3096 | Introduction to Modern Algebra | 3 |
| MATH 3137 | Real & Complex Analysis I | 3 |
| MATH 3138 | Real & Complex Analysis II | 3 |
| MATH 4096 | Senior Problem Solving | 3 |
| PHYS 1061 | Elementary Classical Physics I | 4 |
| PHYS 1062 | Elementary Classical Physics II | 4 |
| Select one of the following courses to fulfill the computer programming requirement: | | 4 |
| CIS 1053 | Programming in Matlab | |
| CIS 1057 | Computer Programming in C | |
| CIS 1068 | Program Design and Abstraction | |
| Total Credit Hours | | 54 |

# Suggested Academic Plan

## B.S.ED. in Secondary Education / Mathematics Education

### Requirements for New Students starting in the 2018-2019 Academic Year

(Certain courses require that a student secure clearances as per the College of Education policy; students should check the current list of courses that require clearances on the College of Education web site (https://education.temple.edu/ofp/clearances).)

| Year 1 | | |
|---|---|---|
| **Fall** | | **Credit Hours** |
| ENG 0802, 0812, or 0902 | Analytical Reading and Writing [GW][1] | 4 |
| GenEd Breadth Course | | 3 |
| GenEd Breadth Course | | 3 |
| EDUC 2103 | Socio-cultural Foundations of Education in the United States | 3 |
| MATH 1041 | Calculus I[1] | 4 |
| | Term Credit Hours | 17 |
| **Spring** | | |
| IH 0851 or 0951 | Intellectual Heritage I: The Good Life [GY][1] | 3 |
| GenEd Breadth Course | | 3-4 |
| EDUC 2255 | Effective Use of Instructional Technology in Classrooms | 3 |
| MATH 1042 | Calculus II[1] | 4 |
| PHYS 1061 | Elementary Classical Physics I | 4 |
| | Term Credit Hours | 17 |

| | | |
|---|---|---|
| **Year 2** | | |
| **Fall** | | |
| IH 0852 or 0952 | Intellectual Heritage II: The Common Good [GZ] | 3 |
| GenEd Breadth Course | | 3 |
| MATH 2111 | Basic Concepts of Math | 3 |
| MATH 2043 | Calculus III | 4 |
| PHYS 1062 | Elementary Classical Physics II | 4 |
| | Term Credit Hours | 17 |
| **Spring** | | |
| SPED 2231 | Introduction to Inclusive Education[1,2] | 3 |
| EDUC 2109 | Adolescent Development for Educators[1,2] | 3 |
| EDUC 4111 | Classroom and Conflict Management in Grades 4 through 12 | 3 |
| MATH 3031 | Probability Theory I | 3 |
| Select one of the following: | | 3-4 |
| MATH 2101 | Linear Algebra | |
| MATH 2103 | Linear Algebra with Computer Lab | |
| | Term Credit Hours | 15 |
| **Year 3** | | |
| **Fall** | | |
| MAES 4371 | History of Mathematics | 3 |
| EDUC 2296 | Effective Teaching: Theory and Practice [WI] | 3 |
| MATH 3003 | Theory of Numbers | 3 |
| MATH 3137 | Real Complex Analysis I | 3 |
| Select one of the following: | | 4 |
| CIS 1053 | Programming in Matlab | |
| CIS 1057 | Computer Programming in C | |
| CIS 1068 | Program Design and Abstraction | |
| | Term Credit Hours | 16 |
| **Spring** | | |
| EDUC 1255 | Inclusive Education for a Diverse Society | 3 |
| MAES 3145 | Teaching Learning Mathematics in the Middle Grades | 3 |
| EDUC 4389 | Field Experience | 1 |
| MATH 3032 | Mathematical Statistics | 3 |
| MATH 3138 | Real Complex Analysis II | 3 |
| MATH 3096 | Introduction to Modern Algebra [WI] | 3 |
| | Term Credit Hours | 16 |
| **Year 4** | | |
| **Fall** | | |
| ENES 3338 | Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12[2] | 3 |
| MAES 4146 | Teaching and Learning Mathematics in High School | 3 |
| EDUC 4389 | Field Experience | 1 |
| SECE 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 [WI] | 3 |
| MATH 3061 | Modern Geometry I | 3 |
| MATH 4096 | Senior Problem Solving [WI] | 3 |
| | Term Credit Hours | 16 |
| **Spring** | | |
| SECE 4688 | Student Teaching in Secondary Education | 9 |
| SECE 4801 | Senior Seminar and Performance Assessment in Secondary Education | 3 |
| EDUC 2306 | Assessment and Evaluation | 3 |
| | Term Credit Hours | 15 |
| | Total Credit Hours: | 129 |

1 Course must be successfully completed to be eligible for Candidacy approval.
2 These 3 courses constitute the waiver for the GenEd Human Behavior category if the courses are completed with a C- or better.