

# BS IN MATHEMATICS + MAT IN ADOLESCENCE ED: MATHEMATICS

## Program Overview

Education Coordinator	Jason Huang, (845) 257-2818, <a href="mailto:huangj18@newpaltz.edu">huangj18@newpaltz.edu</a>
Program Coordinator	David Hobby, (845) 257-3563, <a href="mailto:hobbyd@newpaltz.edu">hobbyd@newpaltz.edu</a>
Program ID	107C
Credits	120-123 UG + 30 GR
Program Length	The MAT can be completed in one additional year of study if enrolled full-time, but students must complete the degree within 5 years.
Modality	In-person
Full-time/Part-time	Full-time or Part-time
Transfer Credits	6
Capstone	Practicum
License/Certification	NYSED Initial/Professional Adolescent Education: Mathematics

## Program Description

We've developed this program in response to popular demand from students and parents who have called for a pathway to fulfilling jobs in education and mathematics, and to school districts who report an increasing number of full-time job openings in STEM disciplines. Graduation from the Five-Year Master Plan empowers students with options to choose the career they find most fulfilling, whether that means becoming a math teacher, working as a mathematician, or pursuing a Ph.D.

### How does it work?

**ENROLL** in the Five-Year Master Plan and begin taking foundational mathematics courses as a first-year student.

**MAINTAIN** a 3.0 GPA as you take embedded education courses and pursue your Bachelor of Science (BS) degree in Mathematics.

**QUALIFY** for early admission to the graduate program during your junior year.

**EARN** your BS degree in four years, while taking education courses to prepare for your accelerated graduate program.

**COMPLETE** the MAT program, including all student teaching requirements in just one year.

## Admission Requirements

1. Meet with your Advisor to review the BS/MAT program requirements.
2. Submit a Declaration of Major/Change of Major form indicating the BS/MAT program in Mathematics (major 512M) to the office of Records and Registration (Wooster Hall, rm. 115).
3. Meet with [Professor Huang](#) to begin selecting courses. Maintain a GPA of 3.0 to fulfill admission requirements for the graduate program.

### Early Admission to Graduate Program

During their **junior** year, students finalize their early admission to the Master of Arts in Teaching program:

- Click this [link](#) to access our new application system.
- Create an account (if you are new to this system) and follow the steps to apply for the fall term.
- Select the fall term when you would like to begin your graduate coursework and major code (107C).  
**NOTE:** This program only admits for the fall term.
- Select "BS Mathematics/MAT Adolescence Ed: Mathematics Program" as the intended curriculum.

### Upload Checklist Items

To expedite a faculty review of a graduate application, students may upload the following items:

- Admission Essay
- Student copies of transcripts\* from every college/university attended

\* Full admission **REQUIRES** the submission of official transcripts and test scores.

### Check Your Application Status

- Check your application status via the [applicant portal](#).

## BS in Mathematics (major 512M)

Course	Title	Credits
<b>Year 1</b>		
<b>Fall</b>		
ENG170	Writing and Rhetoric	4
MAT251	Calculus I	4
Gen Ed: Foreign Language (FL)		3
Gen Ed: The Arts (AR)		3
Gen Ed: World Civilization (OW)		3
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
MAT252	Calculus II	4
MAT260	Introduction to Proof	3
Gen Ed: Humanities (H)		3
Gen Ed: Foreign Lang (FL)		3-4
<b>Credits</b>		<b>13-14</b>
<b>Year 2</b>		
<b>Fall</b>		
MAT353	Calculus III	4
MAT359	Ordinary Differential Equations	3
PHY201	General Physics 1	3
PHY211	Physics 1 Laboratory	1
EDS340	Sociological and Philosophical Foundations of Education (or Gen Ed: United States Studies (USST))	3
<b>Credits</b>		<b>14</b>
<b>Spring</b>		
MAT362	Linear Algebra	3
MAT331	Axiomatic Geometry	3
PHY202	General Physics 2	3
PHY212	General Physics 2 Lab	1

EDS372	Developing Adolescence (or Gen Ed: Social Science (SSCI))	3
Gen Ed: Western Civilization (WC)		3
<b>Credits</b>		<b>16</b>
<b>Year 3</b>		
<b>Fall</b>		
MAT304	Foundations of Algebra	3
MAT381	Probability and Statistics I	3
Math Elective (300-400 level)		3
Upper-division elective		3
Select FIRST course of a pairing below:		3-4
CPS210 Computer Science I (4 cr) and CPS310 Computer Science II (4 cr)		
BIO201 General Biology I (3 cr) + BIO211 General Biology I Lab (1 cr) and BIO202 General Biology II (3 cr) + BIO212 General Biology II Lab (1 cr)		
GLG201 Physical Geology (3 cr) + GLG211 Physical Geology Lab (1 cr) and GLG202 Historical Geology (4 cr)		
CHE201 General Chemistry I (3 cr) + CHE212 General Chemistry I Lab (1 cr) and CHE202 General Chemistry II (3 cr) + CHE212 General Chemistry II Lab (1 cr)		
ECO206 Principles of Microeconomics (3 cr) and ECO207 Principles of Macroeconomics (3 cr)		
<b>Credits</b>		<b>15-16</b>
<b>Spring</b>		
MAT303	Foundations of Analysis	3
MAT441	Abstract Algebra I	3
EDS383	Introduction to Literacy for Diverse Learners	3
Upper-division elective		3
Select SECOND course of the pairings below:		3-4
CPS210 Computer Science I (4 cr) and CPS310 Computer Science II (4 cr)		
BIO201 General Biology I (3cr) + BIO211 General Biology I Lab (1 cr) and BIO202 General Biology II (3 cr) + BIO212 General Biology II Lab (1 cr)		
GLG201 Physical Geology (3 cr) + GLG211 Physical Geology Lab (1 cr) and GLG202 Historical Geology (4 cr)		
CHE201 General Chemistry I (3 cr) + CHE211 General Chemistry I Lab (1 cr) and CHE202 General Chemistry II (3 cr) + CHE212 General Chemistry II Lab (1 cr)		
ECO206 Principles of Microeconomics (3 cr) and ECO207 Principles of Macroeconomics (3 cr)		
<b>Credits</b>		<b>15-16</b>
<b>Year 4</b>		
<b>Fall</b>		
MAT431	Real Analysis I	3
Math Elective (300-400 level)		3
Graduate Math elective (500-700 level)		3
SED540	Graduate Foundations of Adolescence Education Seminar	1
SED525	Digital Literacies and Learning in Secondary Education	1
SPE565	Teaching in Inclusive Classrooms	3
<b>Credits</b>		<b>14</b>

**Spring**

SED493	Integrating English Language Learners in the School & Classroom	3
Upper-division electives		6
Graduate Math elective (500-700 level)		3
SED703	Curriculum: Designs for Literacy, Learning, and Assessment in Adolescence Education	3
SED551	Field Experience I <sup>1</sup>	1
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>120-123</b>

**MAT in Adolescence Ed: Mathematics (major 107C)**

Course	Title	Credits
<b>Year 5</b>		
<b>Fall</b>		
EDS539	Social Foundations of Education <sup>3</sup>	3
EDS730	Adolescent Development <sup>3</sup>	3
SED545	Mathematics in the Secondary School	3
SED552	Field Experience II <sup>1</sup>	1
Graduate Math Elective (500-700 level)		3
Select a Diversity Course from the options below:		3
EDS537 Issues in Multicultural Education		
EDS541 Humanistic/Multicultural Approaches to Education and Human Services		
EDS548 Multicultural Approaches to Helping		
EDS581 Issues of Racism and Sexism in Education		
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
SED604	Practicum in Secondary Ed 7-9	6
SED605	Practicum in Secondary Ed 10-12	6
SED606	Practicum Seminar	1
SED553	Field Experience III <sup>2</sup>	1
<b>Credits</b>		<b>14</b>
<b>Total Credits</b>		<b>30</b>

<sup>1</sup> Includes 35 hours of fieldwork.<sup>2</sup> Includes 30 hours of fieldwork.<sup>3</sup> Students who completed EDS340 and/or EDS372 may substitute graduate education courses, by advisement**Academic Standing Requirements for Bachelor's/Master's Students**

A cumulative GPA of less than 3.0 in graduate-level courses taken in the undergraduate portion of a 4+1 program precludes the student's good standing. Students with GPA of 2.75 to 2.99 strongly advised to reconsider continuing into GR program. Students below 2.75 may not continue and will be de-matriculated from GR program.