BS IN MATHEMATICS + MAT IN ADOLESCENCE ED: MATHEMATICS

Program Overview

Education Coordinator  
Jason Huang, (845) 257-2818, huangj18@newpaltz.edu

Program Coordinator  
David Hobby, (845) 257-3563, hobbyd@newpaltz.edu

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)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Year 1</td>
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<tr>
<td>Fall</td>
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<tr>
<td>ENG170</td>
<td>Writing and Rhetoric</td>
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<tr>
<td>MAT251</td>
<td>Calculus I</td>
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<td>Gen Ed: World Civilization (OW)</td>
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<tr>
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<tr>
<td>MAT252</td>
<td>Calculus II</td>
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<tr>
<td>MAT260</td>
<td>Introduction to Proof</td>
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<td>Gen Ed: Humanities (H)</td>
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<td>Gen Ed: Foreign Lang (FL)</td>
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<td>Year 2</td>
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<tr>
<td>MAT353</td>
<td>Calculus III</td>
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<tr>
<td>MAT359</td>
<td>Ordinary Differential Equations</td>
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<tr>
<td>PHY201</td>
<td>General Physics 1</td>
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<td>PHY211</td>
<td>Physics 1 Laboratory</td>
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<tr>
<td>EDS340</td>
<td>Sociological and Philosophical Foundations of Education (or Gen Ed: United States Studies (USST))</td>
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<td>Credits</td>
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<tr>
<td>MAT362</td>
<td>Linear Algebra</td>
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<tr>
<td>MAT331</td>
<td>Axiomatic Geometry</td>
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<td>PHY202</td>
<td>General Physics 2</td>
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<tr>
<td>PHY212</td>
<td>General Physics 2 Lab</td>
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### Year 3

#### Fall
- 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:

- 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)

**Credits**  16

#### Spring
- MAT303  Foundations of Analysis  3
- MAT441  Abstract Algebra I  3
- EDS383  Introduction to Literacy for Diverse Learners  3

Select SECOND course of a pairing below:

- 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)

**Credits**  15-16

### Year 4

#### Fall
- 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

**Credits**  14

#### Spring
- SED493  Integrating English Language Learners in the School & Classroom  3
- Graduate Math elective (500-700 level)  3
- SED507  Curriculum: Designs for Literacy, Learning, and Assessment in Adolescence Education  3
- SED551  Field Experience I  1

**Credits**  16

**Total Credits**  120-123

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

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<td>Year 5</td>
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<tr>
<td><strong>Fall</strong></td>
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<td>EDS539</td>
<td>Social Foundations of Education</td>
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<td>EDS730</td>
<td>Adolescent Development</td>
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<tr>
<td>SED545</td>
<td>Mathematics in the Secondary School</td>
<td>3</td>
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<tr>
<td>SED552</td>
<td>Field Experience II</td>
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<tr>
<td>Graduate Math elective (500-700 level)</td>
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<td>Select a Diversity Course from the options below:</td>
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<tr>
<td>EDS537 Issues in Multicultural Education</td>
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<tr>
<td>EDS541 Humanistic/Multicultural Approaches to Education and Human Services</td>
<td>3</td>
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<tr>
<td>EDS548 Multicultural Approaches to Helping</td>
<td>3</td>
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<tr>
<td>EDS581 Issues of Racism and Sexism in Education</td>
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**Credits**  16

#### Spring
- SED604  Practicum in Secondary Ed 7-9  6
- SED605  Practicum in Secondary Ed 10-12  6
- SED606  Practicum Seminar  1
- SED553  Field Experience III  1

**Credits**  14

**Total Credits**  30

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1 Includes 35 hours of fieldwork.
2 Includes 30 hours of fieldwork.
3 Students who completed EDS340 and/or EDS372 may substitute graduate education courses, by advisement

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**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.