

Mathematics 4+1 Accelerated Pathway to Master of Science in Mathematics Education (7-12)

The 4+1 accelerated pathway in mathematics education is for students in programs leading to a bachelor's degree in mathematics. The pathway initiates graduate-level coursework at the undergraduate level, providing qualified students with seamless entry to the master's degree program and an accelerated course of study toward an advanced degree.

ABOUT THE PATHWAY

The Mathematics Education (7-12) 4+1 pathway is an accelerated pathway from a bachelor's degree in Mathematics to a master's degree in Mathematics Education. Enrollment in this pathway allows candidates to complete the course requirements for NYS Initial Certification in Mathematics Education (7-12) during the bachelor's portion of their program, while they also take selected graduate courses. Candidates then continue with one full year of graduate study to fulfill the coursework requirements for their master's degree and receive recommendation for Professional Certification in Mathematics 7-12.

Students accepted into the pathway must follow the curriculum map as outlined by the department in order to stay on track. Students begin graduate coursework during their undergraduate studies and are formally accepted into the Graduate School after verification of the completion of bachelor's degree and submission of the application. Graduate applications fees are waived for 4+1 students. Once officially accepted into the graduate program and the Graduate School, graduate credits will be applied to the graduate course of study and all the policies and privileges relevant to graduate students will apply.

APPLYING TO THE 4+1 PATHWAY

Students enter the pathway once they have established a minimum cumulative GPA of 3.0 (4.0 scale) in at least 45 credit hours including the courses listed below. Each successful candidate electing the 4+1 option will be required to submit the statement indicating the candidate's intent to remain at Buffalo State for both undergraduate and graduate studies. Transfer students wishing to enter the pathway may apply providing they obtain a 3.0 or higher in their first semester at Buffalo State.

The following mathematics and education courses must be completed:

- Single and Multivariable Calculus (MAT 161, MAT 162, MAT 263)
- Linear Algebra (MAT 202)
- Discrete Mathematics (MAT 270)
- Field Experience (MED 200)
- Educational Psychology (SPF 303)

Application packets for the 4+1 pathway are available from the Mathematics Department.

Course Map

Students should take the Math 7-12 required courses listed above within first two years of their undergraduate studies. If all courses are completed successfully and a cumulative GPA meets the required 3.0, the student may take 9 credits of the MSED program during their undergraduate studies. Specifically, students should take MAT 501: Mathematics for Teachers: Algebra; MAT 521: Mathematics for Teachers: Geometry; and MAT 581: Mathematics for Teachers: Probability and Statistics.

Transfer

- Transfer students from two-year and other four-year institutions follow the same institutional admission requirements as other students transferring into Buffalo State teacher education programs.
- Acceptance to the 4+1 course sequence is contingent on courses completed at institutions that have transfer equivalence to courses at Buffalo State.
- Transfer students should speak to the Mathematics Department chair or designee before applying. Please call the department at (716) 878-5621 with questions or to arrange an appointment.

FOR MORE INFORMATION

Mathematics Department
Buckham Hall A-238
brusehm@buffalostate.edu
(716) 878-5621