

MSED IN CHILDHOOD EDUCATION 1-6 - SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS SPECIALIZATION (STEM)

STEM Specialization (13ST)

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Students enrolled in the Master of Science in Education Childhood Education 1-6 program may choose to **specialize** in Science, Technology, Engineering and Mathematics (STEM). The planned outcome of the STEM track is the ability to enable children to successfully meet the demands of the highly technological world in which they are growing up and will need to find jobs. This includes nurturing critical thinking skills and problem-solving abilities by thinking/acting as scientists and engineers. The Next Generation Science Standards (NGSS) and the NYS Common Core State Standards (CCSS) in Mathematics serve as a guide for course development and completion. **This specialization will NOT lead to certification as a STEM Education teacher.**

Admission Requirements

Candidates for admission to the program need to:

- Hold a current elementary or childhood teaching certificate from New York State. A copy of this certificate must be submitted as part of the application process. (Note: Students may be accepted into the program "pending" receipt of their teaching certificate if the teaching certificate is being processed by NYSED or if the student is nearing completion of an approved teacher education program.)
- Have earned an undergraduate cumulative grade point average of 3.0 or higher;
- Complete an admission application available from The Graduate School and provide official transcripts of all college/university coursework: <http://www.newpaltz.edu/graduate/forms.html>
- Submit three letters of recommendation on professional letterhead from professionals addressing the competency of the candidate. At least one letter should come from a professor with whom the candidate has taken undergraduate course work;
- Earn a satisfactory score on the Graduate Record Examination (Note: all applicants who apply after August 20, 2015 will be required to take the GRE; prior to this date, the GRE was optional).

Code	Title	Credits
Liberal Arts and Science Core (9 Credits)		
Select 9 credits by advisement ¹		9
Elementary Content Core (15 Credits)		
EED550	Advanced Child Development	3
Select one of the following:		3
EDS581	Issues of Racism and Sexism in Education	
EDS537	Issues in Multicultural Education	

SPE572	Tchg. Learners of Culturally/Linguistically Diverse Backgrounds	
SED566	Education Across Borders:International Ideas and Experience	
SED701	Inquiry into Teaching, Learning, and School: Part I	3
SED702	Inquiry into Teaching, Learning, and School: Part II Every Semester	3
SPE565	Teaching in Inclusive Classrooms ²	3
Pedagogical Core (12-15 Credits)		
The pedagogical core is developed from the student's choice of a specialization track and additional graduate education elective(s).		12-15
Possible courses to be selected through advisement:		
EED735	Workshop in Environmental/Outdoor Education and Mathematics	
EED709	Workshop in Teaching Science and Literacy in the Elementary School	
EED716	Science, Math, and Engineering for Young Children	
EED707	Workshop in Teaching Mathematics and Technology in the Elementary School	
SED560	Technology in the Classroom	
Total Credits		36-39

- ¹ This is a continuation of undergraduate content and aligned with specialization tracks. Courses will be selected with advisement from respective departments from one of the following content areas:
- Science, Mathematics, Technology
 - Social Studies
 - Languages other than English
 - English/Language Arts

Students may also choose, under advisement, to substitute graduate electives in Liberal Arts or Science and/or Fine and Performing Arts (up to 6 credits) to continue in their undergraduate academic major.

- ² Course required for students who have not had a previous course to prepare them to work with students with special needs.

Requirements for Completion of the Degree

Candidates are required to:

- Develop a plan of study with an advisor after matriculating into the program;
- Complete prescribed course work and other requirements within three years of matriculation;
- Maintain a cumulative average of 3.0 or better, with no more than two grades below B-.
- Complete "Dignity for All Students Act" (DASA) Training;

A typical four-semester program for a full-time student would consist of two summer sessions, one fall semester, and one spring semester. There is some flexibility in planning sequences of courses, depending on course availability.