

StFX Master of Education in Mathematics Teaching and Learning
Summer 2025-Spring 2027

The StFX Faculty of Education is proposing to offer an MEd (Curriculum and Instruction) in Mathematics Teaching and Learning for qualified in-service educators, coaches, mentors, and administrators beginning in Summer 2025. This cohort is designed to enhance mathematics knowledge for teaching and allow participants to examine current research in mathematics teaching and learning.

Graduate students will be required to participate in one in-person face-to-face (F2F) course as part of the two-week residency period at the initial Summer Institute. All other courses will be taught online (OL), primarily via a synchronous online format. The first summer courses are condensed over two-week blocks (July 7, 9, 11, 14, 15, 17 and July 21, 23, 25, 28, 29, 31) with a start time of 8:30 am and end time of 3:30 pm, Atlantic Time. Most often, weekday synchronous online courses will be offered from 6:00 pm – 9:00 pm, Atlantic time (Teams, Collaborate, and/or Zoom). Graduate students should ensure that they have adequate personal resources (computer and internet connections) to support distance learning. Laptops/desktop computers are preferred as it is not possible to access all the features of the online platform if tablets and notebooks are used.

Note, this is the first 10-course MEd concentration cohort (previously, MEd degrees at StFX required 12 courses). This means that two July periods now have coursework (rather than three July periods).

The **tentative** schedule of courses is included below:

SUMMER 2025	FALL 2025	WINTER 2026	SPRING 2026	SUMMER 2026	FALL 2026	WINTER 2027	SPRING 2027
534 505	532	527	520C	513 518	536	521C	576

- EDUC 534**
Foundations of Education
 This course provides graduate students with an opportunity to deepen their understanding and awareness of how issues of power and privilege have shaped their own and their students’ lives. Educators will (re)think their pivotal role as teachers of mathematics alongside larger issues of equity and social justice.
- EDUC 505**
Introduction to Education Research
 This course introduces graduate students to approaches to educational research, particularly as it relates to mathematics teaching and learning. It also includes a basic introduction to graduate student writing and literature review methodology.
- EDUC 532**
Curriculum Theory
 In this course, the ideas of major curriculum theorists will be examined and the implications of each position for program development for schooling will be explored.
- EDUC 527**
Principles of Learning
 This course examines theories of learning and development and their implications for instruction. In addition to the general cognitive and behaviourist theories, the course will focus on the aspects of cognitive learning that are relevant to understanding the diversity of learners. Teachers will explore current theories and their implications for practice.

EDUC 520C

Current Research in Curriculum: Mathematics

A critical exploration of recent theories and research related to current issues in curriculum with a concentration in mathematics. In this course, students will explore how mathematical ideas develop throughout the grades. Topics covered will include an overview of quantitative reasoning including number systems and operations, algebraic reasoning, statistical and probabilistic reasoning exploring the ways in which we gather, organize and explain data, and spatial reasoning including the implications of this across content strands.

EDUC 513

Contemporary Theories and Trends in Inclusive Education: Mathematics Education

This course will focus on evidence-based approaches to implementing inclusive education in diverse contexts, including differentiation, Universal Design for Learning, Multi-Tiered Systems of Support, and trauma-informed practices.

EDUC 518

Assessment for/as/of learning

The course explores research that informs how appropriate assessment impacts student motivation, engagement and achievement. Formative assessment will be presented as a process that directly involves both students and teacher in generating quality information that informs the decisions teachers and students make before, during, and after instruction. Practical classroom examples and/or case studies will be explored. The course will also explore summative assessment and critically analyze a variety of tools used to evaluate learning with the aim of finding those that align with current research in assessment. Students will gain the skills necessary to critically evaluate and develop effective assessment approaches in mathematics.

EDUC 536

Program Development

This course helps teachers to explore broader concepts in program development including ideas relating to integrating curriculum, focusing on inquiry and teaching 21st century competencies in a complex, mixed-ability classroom.

EDUC 521C

Current Research in Instruction: Mathematics

A critical exploration of recent theories and research related to current issues in instruction with a concentration in mathematics. In this course, students will examine current approaches to engaging students in meaningful mathematics learning and explore how these instructional strategies are manifested at different grade levels. Explorations of concrete materials, mathematical modelling, problem solving, discourse, and engagement will form the foundation of the course.

EDUC 576

Specific Issues in Curriculum Development

This course will examine selected contemporary educational controversies and explore their implications for curriculum decision-making. Students will examine current issues and problems. In this course students will have an opportunity to dig deeply into a concept that is of interest to them and develop materials to implement in their own classroom or place of work.

Information and Admission Procedures

Applications for this program will be accepted until February 15, 2025.

The application information can be found at [How to Apply](#)

For additional StFX admission inquiries please contact med@stfx.ca.

For additional inquiries specific to this concentration, please contact Lisa Lunney Borden at lborden@stfx.ca.

***Please note on the application that you are applying to the Master of Education in Curriculum and Instruction – Mathematics Education**