



## BACHELOR OF SECONDARY EDUCATION Mathematics

The Bachelor of Science in Secondary Education Major in Mathematics (B SED-MATH) trains learners for the teaching of mathematics at the elementary and junior secondary schools by providing a strong theoretical and practical preparation coupled with a highly developed motivation. It equips beginning teachers with specialization in pedagogical content knowledge and integrates information and communication technology in its pedagogy.

## This Major in Mathematics builds competencies for these jobs:

- Beginning Professional Teacher in Mathematics for Elementary and Junior Secondary Schools.
- Tutor and Facilitator in government, business and community-based organizations.
- Assistant Educational Researcher

### CORE COURSES

- Child and Adolescent Learners and Learning Principles
- The Teaching Profession
- The Teacher and Community, School Culture and Organizational Leadership
- Foundation of special and Inclusive Education
- Facilitating Learner-Centered Teaching
- Assessment in Learning 1
- Assessment in Learning 2
- Technology for Teaching and Learning - 1
- The Teacher and School Curriculum
- Building and Enhancing New Literacies Across the Curriculum

### MAJOR COURSES

- Trigonometry
- College and Advanced Algebra
- History of Mathematics
- Plane and Solid Geometry
- Logic and Set Theory
- Number Theory
- Calculus 1 with Analytical Geometry
- Linear Algebra
- Calculus II
- Elementary Statistics and Probability
- Mathematics of Investments
- Problem Solving, Mathematical Investigation and Modelling
- Principles and Strategies of Teaching Mathematics
- Advanced Statistics
- Assessment and Evaluation in Mathematics
- Research in Mathematics 1
- Abstract Algebra
- Research in Mathematics
- Calculus III
- Technology for Teaching and Learning 2 (Instrumentation and Technology in Mathematics)

### PRACTICUM COURSES

- Field Study 1: Observation of Teaching-Learning in Actual School Environment
- Field Study 2: Participation and Teaching Assistantship
- Practice Teaching

