

**BACHELOR OF SCIENCE
MATHEMATICS MAJOR**

2013/14 Academic Year

REQUIRED JUNIOR LEVEL COURSES¹

9 CREDITS

- MATH 114: Elementary Calculus I²
- MATH 115: Elementary Calculus II
- MATH 120: Basic Linear Algebra I or MATH 125: Linear Algebra I

REQUIRED SENIOR LEVEL COURSES

18 CREDITS

- 15 CREDITS**
- MATH 214: Intermediate Calculus I
 - MATH 215: Intermediate Calculus II
 - MATH 225: Linear Algebra II
 - MATH 310: Real Analysis
 - MATH 330: Ordinary Differential Equations
- 3 CREDITS**
- MATH 200: Fundamental Concepts of Mathematics
 - OR MATH 241: Geometry

GENERAL SENIOR LEVEL COURSES

24 CREDITS

Within the 24 credits required to meet this major's general requirements, a minimum of 6 credits must be completed at the 400-level.

- MATH 200: Fundamental Concepts of Mathematics
- MATH 222: Introduction to Discrete Mathematics
- MATH 228: Algebra: Introduction to Ring Theory
- MATH 241: Geometry
- MATH 311: Theory of Functions of a Complex Variable
- MATH 320: Elementary Number Theory
- MATH 321: Fields and Modules
- MATH 341: Axiomatics of Geometry
- MATH 350: Introduction to Graph Theory
- MATH 361: History of Mathematics
- MATH 410: Analysis and Topology
- MATH 420: Groups and Galois Theory
- MATH 430: Applied Dynamical Systems
- MATH 436: Introduction to Partial Differential Equations
- MATH 495: Special Topics in Mathematics and Statistics^{3,4}

IMPORTANT PLANNING NOTES

1. These courses can be used to satisfy core requirements in the Bachelor of Science degree. Additional prerequisites may be required for other courses in this major.
2. This requirement can also be met with **MATH 113**, which was previously offered at MacEwan University.
3. Students may take **MATH 495** for credit a maximum of two times, as long as the course topic is different each time they take it.
4. **MATH 495** is not listed in the MacEwan University Academic Calendar, but it is scheduled for the 2013/14 academic year.

*This planning sheet should be used only as a **guide** for course planning and it should be used in conjunction with the Bachelor of Science Degree Planner. Remember: not all courses listed are offered each year and course offerings are subject to change. In the event of a discrepancy between the information presented on this sheet and that available on myStudentSystem, the information on myStudentSystem will be considered accurate.*