



MEL 3EI – Grade 11 Workplace

Mathematics for Work & Everyday Life

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will solve problems associated with earning money, paying taxes, and making purchases; apply calculations of simple and compound interest in saving, investing, and borrowing; and calculate the costs of transportation and travel in a variety of situations. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

Prerequisite:

MTH1WI – Grade 9 Destreamed Mathematics or MFM2PI – Grade 10 Applied: Foundations of Mathematics or MPM2DI – Grade 10 Academic: Principles of Mathematics

MBF 3CI – Grade 11 College *Foundations for College Mathematics*

This course enables students to broaden their understanding of mathematics as a problem-solving tool in the real world. Students will extend their understanding of quadratic relations; investigate situations involving exponential growth; solve problems involving compound interest; solve financial problems connected with vehicle ownership; develop their ability to reason by collecting, analysing, and evaluating data involving one variable; connect probability and statistics; and solve problems in geometry and trigonometry. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

Prerequisite:

MFM 2PI – Grade 10 Applied: Foundations of Mathematics or MPM 2DI – Grade 10 Academic: Principles of Mathematics

MCF 3MI – Grade 11 University/College *Functions & Applications*

This course introduces basic features of the function by extending students' experiences with quadratic relations. It focuses on quadratic, trigonometric, and exponential functions and their use in modelling real-world situations. Students will represent functions numerically, graphically, and algebraically; simplify expressions; solve equations; and solve problems relating to applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Prerequisite:

MPM 2DI – Grade 10 Academic: *Principles of Mathematics or* MFM 2PI – Grade 10 Applied: *Foundations of Mathematics*

MCR 3UI – Grade 11 University *Functions*

This course introduces the mathematical concept of the function by extending students' experiences with linear and quadratic relations. Students will investigate properties of discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; investigate inverse functions; and develop facility in determining equivalent algebraic expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Prerequisite:

MPM 2DI - Grade 10 Academic: Principles of Mathematics