COLLÈGE MILES MACDONELL COLLEGIATE – MATH COURSES (ENGLISH PROGRAM)

Grade 9

Students take both courses in Grade 9

Transitional Math 10F	Mathematics 10F
This course is designed to provide students with a strong mathematical foundation as they transition to high school mathematics.	This course covers a broad range of topics, providing students with foundational skills and knowledge in preparation for all possible pathways through high school mathematics.

Grade 10

Students choose the focus course that best supports their interests and future academic plans.

Essentials 20SE	Introduction to Pre-Calculus and Applied 20SI
Students will learn consumer applications, problem solving, decision-making, and spatial sense as it relates to everyday life in a technological society.	Students will learn algebra, number sense, trigonometry, coordinate geometry, relations and functions, systems of equations, linear measurement, and geometry.

Grade 11

Students choose the focus course that best supports their interests and future academic plans.

Essentials 30SE	Applied Math 30SA	Pre-Calculus Math 30SP	Pre-Calculus (Advanced) 30SPA
Students will explore personal finance, problem solving, consumer applications, and spatial sense as they relate to everyday life in a technological society.	Students will explore measurement, geometry, logical reasoning, statistics, and relations and functions with a focus on contextual applications.	Students will explore expressions and equations, sequences and series, trigonometry, and relations and functions with a focus on theoretical mathematics at a high level.	Students will learn algebra, quadratic functions, absolute value, reciprocal functions, and trigonometry.
			Pre-Calculus (Advanced) 40SPA
			Topics in this course include advanced trigonometric and circular functions, operations on functions, transformations and permutations and combinations.

Grade 12

Students choose the focus course that best supports their interests and future academic plans.

Essentials 40SE	Applied 40SA	Pre-Calculus 40SP	Calculus AB 42S (Advanced Placement)
Students will explore consumer applications, problem solving, decision making and spatial sense as it relates to everyday life in a technological society.	Students will explore financial mathematics, logical reasoning, probability, relations and functions and design measurement with a focus on contextual applications.	Students will explore transformations, function operations, trigonometry, polynomials, rational and radical functions, exponential and logarithmic functions, permutations, combinations, and the binomial theorem with a focus on theoretical mathematics at a high level.	AP Calculus AB is an introductory university-level calculus course. Students cultivate their understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions.