

PRE-CALCULUS 11

Credits: 4

In helping to equip students with transferable skills for the 21st century workplace, this course gives attention to curricular competencies like developing thinking strategies, analyzing ideas, modeling with Mathematics, choosing the best option when faced with different perspectives, building connections between concepts, using math vocabulary in explanation, and showing reasoning through algebra. Highly concentrated with algebra, Pre-Calculus 11 is the pre-requisite for Pre-Calculus 12, both of which serve to lay the foundation for college and university Calculus, the stream of mathematics necessary in programs like Science, Health Science, Business & Economics, Engineering and Computer Science.

Curricular Competencies:

Reasoning and Modelling

Understanding and Solving

Communicating and Representing

Connecting and Reflecting

Content:

- **real number** system
- **powers** with rational exponents
- **radical** operations and equations
- polynomial **factoring**
- **rational** expressions and equations
- **quadratic** functions and equations
- linear and quadratic **inequalities**
- **trigonometry**: non-right triangles and angles in standard position
- **financial literacy**: compound interest, investments, loans

Materials Required: Graphing paper, scientific calculator

Prerequisites: FMP10 (recommend 70% or higher)