MATH 1121 (Calculus for Engineering Technology) Course Outline

- 1.3 Rectangular Coordinates
- 1.4 The Graph of a Function
- 2.1 Some Basic Definitions
- 2.2 The Straight Line
- 2.3 The Circle
- 2.4 The Parabola
- 2.5 The Ellipse
- 2.6 The Hyperbola
- 2.7 Translation of Axes
- 1.2 Algebraic Functions
- 3.1 Limits
- 3.2 The Slope of a Tangent to a Curve
- 3.3 The Derivative
- 3.4 The Derivative as an Instantaneous Rate of Change
- 3.5 Derivatives of Polynomials
- 3.6 Derivatives of Products and Quotients of Functions
- 3.7 The Derivative of a Power of a Function
- 3.8 Differentiation of Implicit Functions
- 3.9 Higher Derivatives
- 4.1 Tangents and Normals
- 4.4 Related Rates
- 4.5 Using Derivatives in Curve Sketching
- 4.6 More on Curve Sketching
- 4.7 Applied Maximum and Minimum Problems
- 4.8 Differentials and Linear Approximations

- 5.1 Antiderivatives
- 5.2 The Indefinite Integral
- 5.3 The Area Under a Curve
- 5.4 The Definite Integral
- 7.1 The Trigonometric Functions
- 7.2 Basic Trigonometric Relations
- 7.3 Derivatives of the Sine and Cosine Functions
- 7.4 Derivatives of the Other Trigonometric Functions
- 8.1 Exponential and Logarithmic Functions
- 8.2 Derivative of the Logarithmic Functions
- 8.3 Derivative of the Exponentials Function
- 9.1 The General Power Formula
- 9.2 Basic Logarithmic Form
- 9.3 Exponential Form
- 9.4 Basic Trigonometric Forms