Math syllabus.
Entry qualification to the study Programme Bachelor of Engineering in Biotechnology.

Applicants should be aware that it is advisable that the Mathematics topics listed in were included in previous studies

Topics	Description
Functions including one variable	■ Inverse functions ■ Domain and range ■ Linear functions ■ Polynomials ■ Rational functions ■ Trigonometric functions (sine, cosine and tangent) ■ Exponential and logarithm functions (including the laws of these)
Differentation	■ The concept of limit ■ Tangents and normal ■ Rules of operations for differentiation (product, quotient, chain rule)
Integration	■ Indefinite integral ■ The definite integral ■ Rules for the integral ■ Integration by substitution ■ Integration by parts ■ Calculation of areas by integration ■ Calculation of volumes of revolution by integration
Vectors in two and three dimensions	■ Rules of operations for vectors in two and three dimensions ■ Scalar product ■ Vectors in coordinate geometry
Differential equations	■ General/particular solution ■ Separable equations of first order