Faculty of Computers and Information Technology

Calculus

Information :

Course Code :	BMT 111	**Level :**	Undergraduate	**Course Hours :**	3.00- Hours

Department :	Faculty of Computers and Information Technology

Instructor Information :

Title	Name	Office hours
Lecturer	Ahmed Lotfy Ibrahim Ibrahim El Bably	1
Assistant Lecturer	Salma Asaad Mohamed Shatta	
Teaching Assistant	Ahmed Mahmoud Ahmed Mahmoud	

Description :

The course provides the fundamental principles and techniques of calculus, which is a branch of mathematics that deals with rates of change and accumulation. Topics covered in this course are functions, limits, continuity, differentiation and rules of differentiation, chain rule, implicit differentiation, differentiation of parametric functions, transcendental functions and differentiation. Also, the course covers trigonometric and inverse trigonometric functions, exponential and logarithmic functions, hyperbolic and inverse hyperbolic functions, indeterminate forms and l'hopital's rule, application of derivatives, taylor and maclaurin expansion and extrema of a function, integration concepts, transcendental functions and techniques of integration like integration by substitutions, integration by parts and integration by partial fractions.