EMT1201 Engineering Mathematics II

Hours per Semester				Weighted Total Mark	Weighted Exam Mark	Weighted Continuous Assessment Mark	Credit Units
LH	PH	TH	CH	WTM	WEM	WCM	CU
60	0	0	60	100	60	40	4

Course Description

Against the foundation of the Calculus and Algebra covered in Engineering Mathematics I, this course develops the fundamental aspects of Mathematical Analysis critical to Engineering. The major themes include; Ordinary Differential Equations, Real Analysis, and Numerical Analysis.

Objectives

- To introduce students to the concept of Single Predictor-Response mathematical modelling in areas such as electrical circuit problems and vibratory and oscillatory mechanical systems
- To expose students to analytical solutions of classical ordinary differential equations in mathematical physics.
- To expose students to the fundamentals of Real Analysis.
- To introduce students to the foundations of Scientific Computing and Numerical Analysis.