



Course Weekly Outline

Week No.	Theoretical	Experimental
1	Introduction to Numerical Methods	
2	Knowing what numerical methods and approximate solution are and how to calculate the error in the approximate solution	
3	Applying the bisection, fixed point, Newton-Raphson and modified Newton methods in solving algebraic equations	
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5	Solving a set of simultaneous algebraic equations numerically	
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7	Applying Taylor series in approximating functions	
8	Performing the differentiation of functions numerically	
9	Performing the integration of different functions numerically	
10	Applications of numerical differentiation and integration	
11	Applying the Euler, Runge-Kutta and finite difference methods in solving ordinary differential equations	
12	Applying the finite difference method in solving partial differential equations	
13	Applying the finite difference method in solving partial differential equations	
14	Finding the curve that fits a set of points Performing interpolation and induction in approximating functions	
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