



H-Form ECE 202

A Brief Course Description			
College	Engineering		
Department/ Program	Electrical Engineering – Communication + Electronics Engineering		
Course Name	Engineering Mathematics		
Course Code	ECE 202		
Year / Level	3/5		
Credit Hours	3		
Contact Hours	Lecture: 3	Lab/Tutorial: 0	Training: 0
Language	English		
Track	<input type="checkbox"/> University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Program		
	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Elective		
Pre-requisites Course	MATH 221		
Co-Requests	-		
Course Description	Special functions. Bessel's functions and Legendre polynomials. Vector analysis including vector fields, divergence, curl, line and surface integrals, Green's, Gauss' and Stokes' theorems. Sturm-Liouville theory. Complex Numbers, Functions of a complex variable, differential complex calculus. Complex integration, Cauchy's theorem. Complex series, Taylor and Laurent series. Residue theorem. Introduction to partial differential equations and boundary value problems in rectangular, cylindrical and spherical coordinates.		