Program	BACHELOR OF VOCATION (B.Voc.)	**Semester - 3**
Type of Course	-	
Prerequisite		
Rationale	-	
Effective From A.Y.	2025-26	

Teaching Scheme (Contact Hours)				Examination Scheme				
				Theory Marks		Practical Marks		
Lecture	**Tutorial**	**Lab**	**Credit**	**SEE T**	**IAT**	**SEE P**	**CCE**	**Total Marks**
3	1	-	4	50	-	-	20	70

***SEE** - Semester End Examination, **IAT** - Internal Assessment Test, **CCE** - Continues & Comprehensive Evaluation*

Course Content

T - Teaching Hours | **W** - Weightage

Sr.	Topics	T	W
1	**STATISTICS:** Measure of central tendency: Mean, Median, Mode, Mean Deviation Standard Deviation.	8	25
2	**DETERMINANT AND MATRICES** Basics of determinants, Matrices of order m×n, Matrices operation – Addition, Subtraction, Multiplication, Transpose, Elementary operations, Inverse.	12	25
3	**COMPLEX NUMBER** Basic Properties of Complex Numbers, Algebra of Complex Number, Modulus, Argument.	8	20
4	**DIFFERENTIATION & INTEGRATION** Basic Differentiation Formulae, u v Rule, u/v Rule, Chain Rule Basic Integration Formulae, Properties of Definite Integrals	9	15
5	**FIRST ORDER ODE** Order and Degree, Formation of a differential equations, Method of solving First order ordinary differential equations: Separable variable, linear differential equations	8	15
	Total	**45**	**100**

Course Outcomes

At the end of this course, students will be able to:	
CO1	Apply the concept and methods of central tendency, correlation, correlation coefficient and regression in engineering.
CO2	Perform Determinant and matrix computations in a comprehensive manner.
CO3	Solve engineering related problems based on concepts of vectors
CO4	Find differentiation & integration of basic functions.
CO5	Form and solve first order ordinary differential equations