

**TECNIA INSTITUTE OF ADVANCED STUDIES**  
Grade 'A' Institute  
**Department of Information, Communication & Technology**  
**Bachelor of Computer Applications (BCA)**  
Scheme and Syllabus (w.e.f. Academic Session 2024-25)  
As per UGC Curriculum & Credit Framework for Undergraduate Programme (CCFUP)  
(Dec 2022): GGSIP University, Delhi

**COURSE CODE: BCA 181T**

**COURSE NAME: BRIDGE COURSE IN MATHEMATICS**

**Aim:** To build mathematical aptitude of the students for understanding the basic concepts of core courses of mathematics of the programme.

**LEARNING OBJECTIVES:**

The objectives of this course is to provide the learners

- The knowledge about the matrices, determinants and limits.
- Familiarity with basic concepts of differential and integral calculus.

**COURSE OUTCOMES (COs):**

After completion of this course, the learners will be able to:-

CO #	Detailed Statement of the CO
CO1	Understand the various approaches dealing the data using theory of matrices
CO2	Understand and apply the concepts of determinants
CO3	Understand the concept of calculus such as limit, continuity and differentiability.
CO4	Appraise and determine the correct logic and solutions for any given real world problem using application of integration& integral calculus.

Course Outcomes	Program Outcomes (Scale – 1: Very Low, 2: Low,3:Medium,4:High)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	-	2	-	2	1	-	1	2	1	2
CO2	-	2	-	2	1	-	1	2	1	2
CO3	-	2	-	2	1	-	1	2	1	2
CO4	-	2	-	2	1	3	1	2	1	2