

**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 107T**

**COURSE NAME: MATHEMATICAL FOUNDATION FOR COMPUTER SCIENCE**

**LEARNING OBJECTIVES:**

The objectives of this course are to provide the learners with the following:

1. The Knowledge of mathematical probability
2. Understanding of various numerical techniques
3. Familiarity with the Linear Programming and it's applications

**PRE-REQUISITES: Basic Concepts of Mathematics**

**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 Probability
CO2	Understand various numerical techniques and apply them to solve real life problems
CO3	Understand various techniques to solve linear simultaneous equations
CO4	Analyse and evaluate the accuracy of common Numerical Methods

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	1	2	-	-	1	-	-	-
CO2	-	2	1	2	-	-	1	-	-	-
CO3	-	2	1	2	-	-	1	-	-	-
CO4	-	2	1	2	-	3	1	-	-	-