

**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 2021-22)  
(Dec 2022): GGSIP University, Delhi

**COURSE CODE: BCA 108#**

**COURSE NAME: DATABASE MANAGEMENT SYSTEM**

**LEARNING OBJECTIVES:**

The objective of this course is to provide the learners with the following:

1. Understanding of the requirement of database management System for storing data and its advantages over file management system.
2. Designing the database conceptually, physically and finally implementing the creation of database for any application.
3. Learning of queries in SQL for creating database and performing various operations for manipulating data in the database.
4. Knowledge of database utilities i.e. backup, recovery, transaction processing.

**PRE-REQUISITES:**

1. Basic knowledge of data storage and file management system

**COURSE OUTCOMES (COs):**

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

CO #	Detailed Statement of the CO
CO1	Understand the DBMS concepts with detailed architecture, characteristics. Describe different database languages and environment and learn various data models, along with the related terminologies
CO2	Understand and apply linear and nonlinear data structures and their operations.
CO3	Compare and implement searching, sorting and hashing techniques.
CO4	Appraise and determine the correct data structure for any given real world problem.