



**Course Name** IBM CE - Basics of Information Management with DB2

**Course Code** IMDB2BIN

**Course Duration** 25 Hours

**About Technology** Information Management software offers you end-to-end capabilities to manage data and content, pull together information from diverse sources, and gain valuable insights to optimize business processes.

At the core of IBM's software solution for information management is a powerful family of relational database management system (RDBMS) servers, which provides the right capabilities to manage data and support operational and analytic applications. The integrated data management portfolio provides a modular environment to design, develop, deploy, operate, optimize, and govern data, databases, and data-driven applications. IBM also provides a unified, powerful data warehousing and business intelligence software that gathers, manages, and analyzes data.

**About Course** This course introduces the features, functions, and services provided by DB2, a relational database management system. Topics covered include: installation; data modeling and design; relational databases; database query languages; relational database design; distributed databases; physical database design; information storage and retrieval; and mapping DB2 vs. Oracle.

**Target Audience** The Information Management course enables students in early stages of undergraduate studies with an understanding of Relational Database Management concepts and its application in current day data management applications.

- Students of:
- CS/IT/ ECE/EEE – 1<sup>st</sup> / 2<sup>nd</sup> Year
  - MCA – 1<sup>st</sup> Year
  - BCA/ BSC – 1<sup>st</sup> year

**Pre-requisites** No previous Software knowledge, other than basic computer/Windows usage required.

<b>Contents</b>	Relational Databases	Installation and Planning
	Data Modeling	Data Modeling and Database Design
	Relational Databases	Introduction to RDBMS Understanding a table Relational Concepts
	Database Query Languages	Simple SQL Queries Retrieving Data from Multiple Tables Scalar Functions and Grouping
	Database Query Languages	Column Functions and Grouping Union Using Sub-queries



Relational Database Design	Views and Results during DB Design Problem Statement
Relational Database Design	Entity Relationship Model
Relational Database Design	Data and Process Inventories
Relational Database Design	Tuple Types From Tuple Types to Tables
Relational Database Design	Integrity Rules
Relational Database Design	Indexes Logical Data Structures
Distributed Databases	Distributed Data
Physical Database Design	Physical Implementation Intermediate SQL Maintaining Data
Information Storage and Retrieval	Creating and Accessing DB2 Databases Planning Disk Usage Data Migration Methods – Loading Tables Capacity Management Data Moving Data
Information Storage and Retrieval	
Mapping	DB2 vs. Oracle

**Applicable Certification**

- NA -

**Follow on courses**

- IBM CE Introduction to Object -Oriented Programming using Java
- IBM CE - Fundamental Course in DB2 - Database Administration for Linux, Unix and Windows
- IBM CE - Fundamentals of Software Testing with IBM Rational Tools