

- COURSE CODE:** DZ9FUN
- COURSE TITLE:** DB2 for z/OS Fundamentals
- CURRENCY:** V8 & V9
- AUDIENCE:** Aspiring DB2 developers, DBAs, system administrators, capacity planners or general management.
- LEVEL:** Beginner to intermediate
- PREREQUISITES:**
1. Those conversant with DB2 for Linux, UNIX, Windows (LUW), or iSeries.
 2. Those conversant with competing relational solutions, e.g., Oracle, Sybase, SQL Server, etc.
 3. Those new to relational concepts but have worked with other DBMS (e.g., IMS) or file system (e.g., VSAM).
- DURATION:** 2 days
- SUMMARY:** Delegates attending this introduction to DB2 in general and DB2 for z/OS, V8/V9, in particular would acquire a comprehensive introduction to IBM DB2 architecture, relational concepts, utilities, SQL, Application Programming Interfaces (APIs), security, etc.
- OBJECTIVES:** Upon completion of this course, the participant should be literate with DB2 for z/OS, V8 & V9, per the 'Core Topics' that follow.

1. THE DB2 FAMILY

- DB2 platform options

2. DB2 CONCEPTS

- Structured Query Language (SQL)
- Overview of pureXML
- DB2 data structures
- Data and integrity
- Application processes and transactions
- Packages and application plans
- Routines
- Distributed data
- DB2 system structures

3. DB2 FOR z/OS ARCHITECTURE

- z/OS Overview
- DB2 in the z/OS environment
- DB2 lock manager
- DB2 and the z/OS Security Server
- DB2 attachment facilities
- Distributed data facility
- The Parallel Sysplex environment

4. DB2 OBJECTS & RELATIONSHIPS

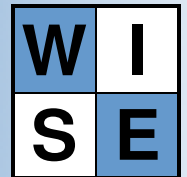
- Logical database design using entity-relationship model
- Physical database design

5. SQL

- Executing SQL
- Writing SQL queries (e.g., SELECT, GROUP BY)
- Data modification (e.g., UPDATE)

6. APPLICATION PROGRAMMING

- Development environments
- Programming languages
- Application program preparation
- Static SQL applications
- Dynamic SQL applications
- Java support (e.g., JDBC)
- Stored procedures



7. DATABASE IMPLEMENTATION

- Defining tables
- Columns and rows in a table
- Table spaces
- Indexes
- Views
- Large objects
- Databases
- Relationships with referential constraints
- Triggers
- User-defined functions

8. DB2 OPERATIONS & MANAGEMENT

- Tools to manage DB2
- DB2 locking and concurrency
- DB2 commands
- DB2 security and authorisation
- DB2 performance tools

9. DB2 & THE WEB

- Web application environment
- Web-based applications and WebSphere Studio Application Developer
- XML and DB2
- SOA, XML and Web services

10. DATA SHARING OVERVIEW

- How data sharing works
- Advantages of DB2 data sharing