Course Design Document

Course Code	
Course Name	RDBMS

Duration (in days)	2.5	Proficiency Level	Fundamental
Pre-requisites	None	Target Audience	Campus Hires

Learning Outcome

At the end of the program, participants will learn

- Database, DBMS and RDBMS concepts
- DBMS Architecture
- Data Models
- ER Diagram
- Relation Database concepts
- Normalization Process and different Normal forms
- Case Study on ER Diagram
- Case Study on Normalization

Day-wise Session Plan

Day	Unit	Objective(s)	Hours
1	Database Fundamentals	• What is a Database? • What is DBMS? • DBMS vs File System • DBMS Architecture • Three-level DBMS architecture	2

2	Data Models	• Data Models and Types of Data Models
		• What is and Entity Relationship Diagram (ER Diagram)?
		• Components of an ER Diagram
		• Relationship
		  ○ One to One
		  ○ One to Many
		  ○ Many to One
		  ○ Many to Many
		• Case Study on ER Diagram
			6

3	Relational Database concepts	• RDBMS Concepts • Keys in DBMS	4

4	Normalization	• Normalization
		  ○ First normal form(1NF)
		  ○ Second normal form(2NF)
		  ○ Third normal form(3NF)
		  ○ Boyce & Codd normal form (BCNF)
		• Case Study on Normalization
			8

		Total	20