

## **Irizpro** Inspire Excellence

# ABOUT US

Irizpro Training Solutions is a premier training institute that was founded in January 2019. The institute provides comprehensive training solutions to students and corporate clients alike. The training programs are designed to equip learners with the knowledge and skills they need to succeed in their respective fields. With a team of highly qualified and experienced trainers.

Our courses are designed to meet the evolving needs of the industry, and our trainers are dedicated to helping learners achieve their goals. Whether you are a student looking to enhance your skills or a corporate client seeking to upskill your workforce, Irizpro is the perfect training partner for you.

Education Partners



#### Module 1: Introduction to Databases and SQL (2 days)

-Introduction to databases

-What is SQL?

-Relational databases vs. non-relational databases

-SQL as a language for managing and querying data

-Overview of popular database management systems (e.g., MySQL, PostgreSQL, SQL Server)

#### Module 2: SQL Basics (3 days)

-SQL data types -Creating and altering tables -Inserting data into tables -Retrieving data with SELECT -Filtering and sorting data -Using WHERE clause and comparison operators -Basic SQL functions (e.g., COUNT, SUM, AVG, MIN, MAX)

#### Module 3: Advanced Querying (5 days)

-GROUP BY and HAVING clauses

-Subqueries

-Joins (INNER JOIN, LEFT JOIN, RIGHT JOIN, FULL JOIN)

-Set operations (UNION, INTERSECT, EXCEPT)

-Case expressions and conditional logic

-Window functions (e.g., ROW\_NUMBER, RANK, DENSE\_RANK)



### **Course Curriculum**

#### Module 4: Data Modification (3 days)

-Updating and deleting data
-Inserting data using subqueries
-Transactions and ACID properties
-Constraints (e.g., PRIMARY KEY, FOREIGN KEY, UNIQUE)
-Handling NULL values
-Importing and exporting data

#### Module 5: Data Modeling and Design (3 days)

-Entity-relationship diagrams (ERD)
-Normalization (1NF, 2NF, 3NF)
-Denormalization
-Indexing and performance optimization
-Designing databases with relationships
-Database design best practices

#### Module 6: Real-world Applications and Case Studies (3 days)

- -Building database-driven applications
- -Solving real-world problems with SQL
- -Advanced SQL techniques for complex queries
- -Performance profiling and optimization
- -Best practices for SQL development

#### Module 7: SQL and Business Intelligence (1 days)

- -Introduction to BI tools
- -Connecting SQL databases to BI tools
- -Data visualization and reporting
- -Building dashboards
- -SQL for data analysis

#### Irizpro