IntelliBI
Innovations Technologies

Azure

Driving Excellence:

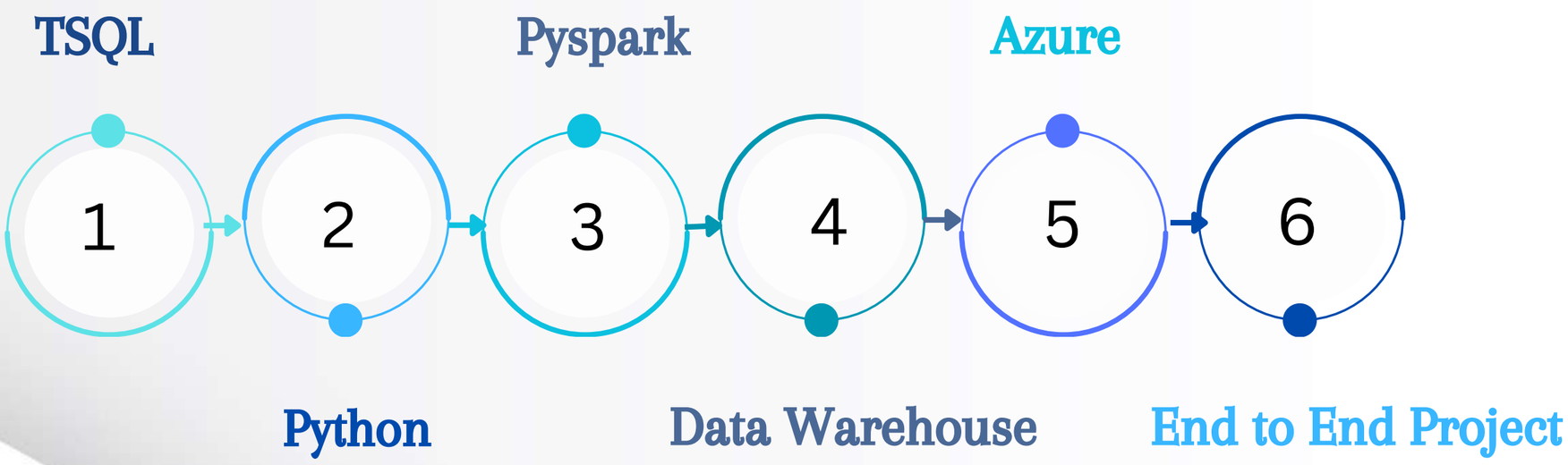
Your BI and AI Journey Starts Here!

Azure Data Engineer

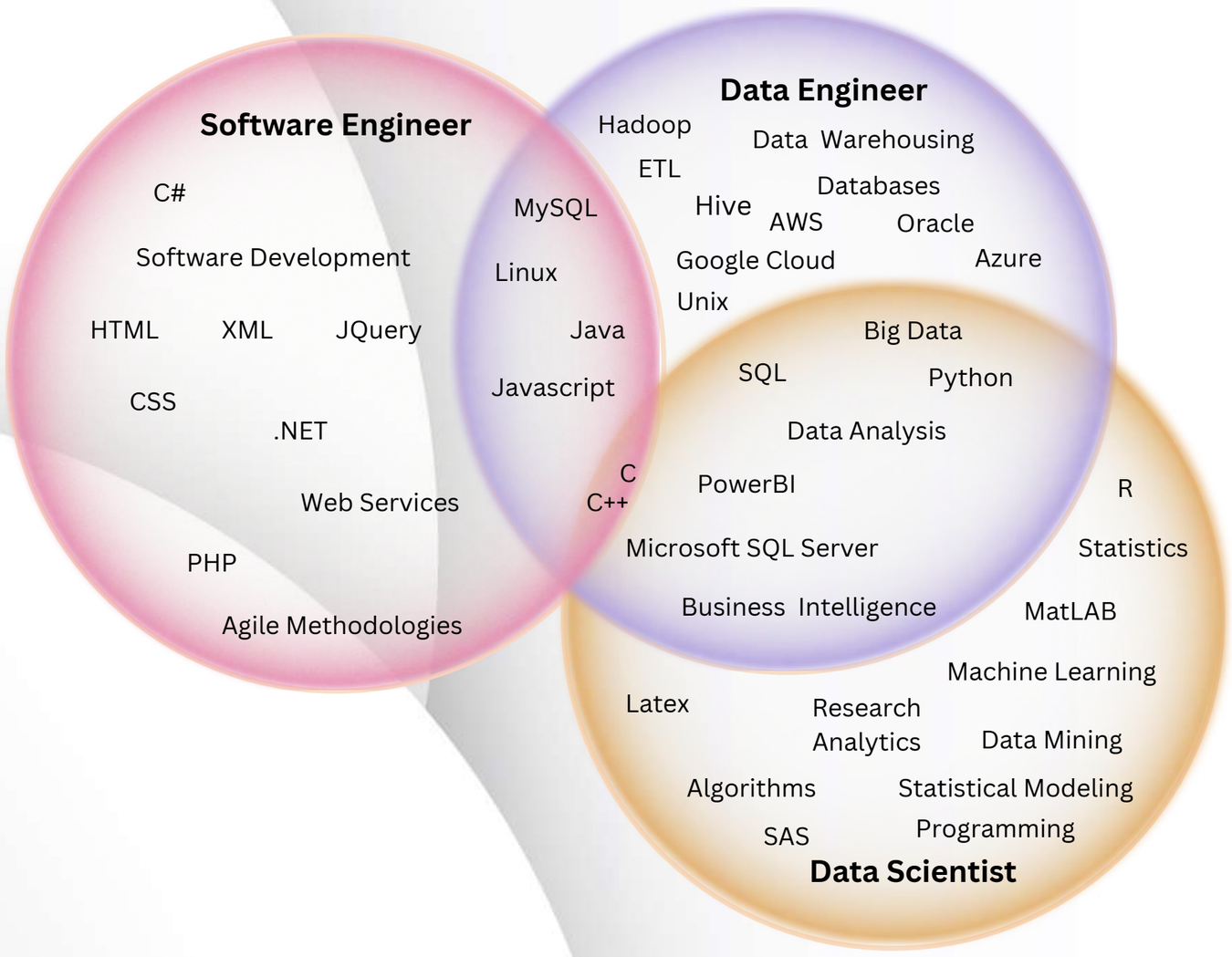
IntelliBI
Innovations Technologies

Course Duration	Batches	Mode
5.5 Months	Weekend(Sat/Sun)	Online(Zoom)

Technologies



Skills And Qualifications



IntelliBI
Innovations Technologies

TSQL Curriculum

Introduction

SQL Type

- DDL
- DML
- TCL
- DCL
- DQL

Constraints

- Primary Key
- Unique
- Foreign Key
- Check
- Default
- NOT Null

Clause

- DISTINCT
- WHERE
- ORDER BY
- GROUP BY
- HAVING

Operators

- IS NULL
- LIKE
- BETWEEN
- IN

Functions

- String
- Date
- Numeric
- Conversion
- Aggregate

Joins

- Inner Join
- Left Outer Join
- Right Outer Join
- Full Outer Join
- Cross Join
- Self Join

Subqueries

- Single-row subqueries
- Multiple-row subqueries
- Correlated subqueries

Set Operator

- Union All
- Union
- Intersect
- Minus

IntelliBI
Innovations Technologies

TSQL Curriculum

Views

- Simple View
- Complex View
- Materialized views

Indexes

- B-Tree Indexes
- Bitmap Indexes
- Function Based Indexes

Analytical Functions

- RANK
- DENSE_RANK
- ROW_NUMBER
- FIRST_VALUE,
- LAST_VALUE
- LAG
- LEAD

Advanced SQL

- PIVOT
- UNPIVOT
- PARTITIONS

PLSQL

- Stored Procedure
- Stored Function

IntelliBI
Innovations Technologies

Python Curriculum

Python

- Setup Python
- "Hello world"
- Datatypes-Numbers, Strings, Boolean
- String Functions: Indexing, Slicing
- Print Formating with Strings
- Variables
- Operators
- List
- Dictionary
- Tuples
- Sets in Python
- If, Elif and Else
- For Loops
- While Loops (including break and continue, Pass)
- Functions and Recursions
- Local and Global variable
- Error and Exception Handling

Pandas And Numpy

- Create Pandas DataFrame
- Numpy Array Operations
- Pandas DataFrame Operations

IntelliBI
Innovations Technologies

PySpark Curriculum

Spark

- Why Spark?
- Spark Unified Stack
- Spark Architecture
- Spark APIs
- SparkSession
- DataFrames
- Transformations, Actions & Lazy Evaluation
- Spark UI

Spark SQL

- Spark Structured APIs
- DataFrames & Datasets
- Spark SQL Types
- Spark SQL Code Execution
- DataFrame Operations
- DataFrame Aggregation Functions
- Grouping, Windows & Joins
- Spark SQL Data Sources

Spark Streaming

- Introduction to Spark Streaming
- PySpark Streaming with Apache Kafka
- Real-world Practical use cases
- Operations On Streaming Dataframes and Datasets
- Window Operations

IntelliBI
Innovations Technologies

Datawarehouse Curriculum

Datawarehouse

- Why Data warehousing?
- What is Data warehouse?
- DW Architecture
- OLTP vs OLAP
- ETL Basics
- Dimensional Modeling (Fact, Dimensions)
- Star Schema
- Snowflake Schema
- Slowly Changing Dimension

IntelliBI
Innovations Technologies

Azure Curriculum

Cloud

- What is cloud?
- Why the cloud?
- Service Models
- Depolyment Model
- Major Cloud Providers

Azure

- Setup Free Trial
- Azure Resource Management
- Subscription, Resoure Group
- Regions and Availbility Zones
- Azure Key Vault

Azure Storage

- Region Pairing
- Azure Blob Storage
- Azure Data Lake Gen 2 Storage
- Replication Options
- Access Tiers
- Azure Storage Explorer

Azure SQL

- What is Azure SQL?
- Azure SQL PaaS Options
- Single vs Elastic vs Managed Instance
- Delta Lake Tables,Instances
- DTU vs Vcore Purchase Model
- Setup Azure SQL +
  Create Sample Tables

Azure Data Factory

- Azure Data Studio
- Azure Data Factory Overview
- Demo - Provision ADF
- Linked Services
- Integration Runtimes
- Datasets -Dynamic
- Pipelines and Activities
- Copy Data
- For Each
- Until
- Get Metadata
- Lookup
- If Activity
- Wait
- Fail
- Execute Pipeline
- Global Parameters
- Data Flows
- Schedule Trigger
- Event Trigger
- Monitor Pipelines

Azure Synapse

- Azure Synapse Analytics
- Overview Serverless, Dedicated SQL And Spark Pool
- Access DataLake Storage Account
- Azure Synapse Notebooks, SQL Scripts, Pipelines

IntelliBI
Innovations Technologies

Azure Curriculum

Spark using Synapse/Databricks

- Spark Overview
- Spark Dataframes
- Reading CSV files from Data Lake
- Transform Data using (Spark SQL)
- Aggregate Dataframes
- Dataframe Joins and other transformations
- Spark UDF Functions

Databricks

- Spark Dataframe Write in Parquet Format
- Calling Spark Notebooks from ADF
- Databricks Workspace, Clusters, Notebooks
- Databricks Jobs Run
- Databricks Compute, SQL Scripts
- Access Data using DataLakeStorage, Storage Account Key
- Create DeltaLake Tables, Instances

IntelliBI
Innovations Technologies

Our Alumni Work in Top Companies

accenture
HDFC BANK
We understand your world
HSBC
ICICI Bank
IndusInd Bank
wipro
TATA CONSULTANCY SERVICES
Hindustan Unilever Limited
Capgemini
ITC Limited
KPMG
pwc

tcs | TATA CONSULTANCY SERVICES
Mindtree
Infosys®
HCL
Tech Mahindra
wipro
L&T Infotech
InterviewBit

IntelliBI
Innovations Technologies

+91 74987 56891

IntelliBI Innovations Technologies

Sagar Complex, Dange Chowk, Jai Hind nagar, Thergaon, Pimpri-Chinchwad, Maharashtra 411033

info@intellibiinnovationstechnologies.in | www.intellibiinnovationstechnologies.in