



# Cloud Data Engineering

www.leadtecno.com

## About the Program

Are you passionate about building solutions to solve problems using data? Leadtecno's Data Engineering Training will provide you with the skills to design data products that make a positive impact and drive change. This training is a technical stream that contains six courses designed for data professionals that want to further their career in a fascinating discipline. As a Data engineer, transform the way organizations think, view, and create business value from data by :

- Applying the fundamentals of data architecture
- Transferring enterprise data to cloud hosted environments
- Mastering computer programming skills that are essential to create data engineering products
- Refining data that can be used to provide decision makers with actionable information

• Preparing data for presentation of business and analytical insights The Data Engineering Training concludes with a project where you will build a minimum viable data engineering product (MVP) that you can use in your resume or on your portfolio.



## **POTENTIAL JOB TITLES**

#### Data Engineer

**Cloud Data Engineer** 

Data Warehouse Developer

Data Warehouse Engineer

**Analytics Engineer** 

**Big Data Developer** 

**ETL Specialist** 

**ETL Developer** 

Software Engineer (Data)

**Data Architect** 

**Data Integration Developer** 

**Data Solution Developer** 



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## Cloud Data warehouse Fundamentals

- Big data overview and objectives
- → Hadoop architecture History and evolutions



#### Azure Data bricks, Spark, Pyspark

- Azure Data bricks Workspace creation, delta tables, spark SQL, cluster management.
- Spark data frames and tables
- Data frame transformations and actions
- A Managed vs. External Tables
- Data frame transformations
- Spark aggregations
- Spark data frame internals
- Spark joins and optimizations
- Spark streaming



#### Snowflake

- Snowflake Internal stage
- Snowflake External stages
- Transaction, Commit and Rollback in Snowflake
- Snowflake CDC
- Snowflake ZERO copy cloning

- Different types of tables in snowflake
- Caching in Snowflake Data Warehouse

#### **Azure Data factory**

- Data pipelines and Dataflow using ADF
- Incremental and Batch Pipelines
- Connectors: Azure services, databases, Nosql, files, generic protocols, services & apps, custom
- Activities: data movement, data transformation, control flow
- Parameterization
- Pipeline Monitoring Debugging and Performance
   Optimization
- Integration Runtimes





#### Data Modelling & Azure Synapse

- Azure Synapse Introduction and account creation
- Design a modern data warehouse using Azure
   Synapse analytics



## **Cloud Devops and CICD**

- Introduction to CICD with azure data ops



#### **Tools & Services Used**

- Azure data Factory
- Azure Data bricks
- Azure Synapse
- Azure Functions, Logic Apps, Azure Storage, Key Vault
- Snowflake





#### Path to success



#### How much do cloud data engineers make in Canada?

# \$125,000

According to our salary calculator, the average annual salary for Cloud Engineers working in Toronto is \$125,000.

Low: **\$100,000** 

Median: **\$ 125,000** 

High: **\$ 150,000** 



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