

Training Program

DP-203 Data Engineering on Microsoft Azure Training









About Program







Our course content has been specifically designed to turn you into a skilled professional in this industry. As a part of your certification training, you will receive enough study material and recorded video sessions that will help you cover all the latest trends and features in this course. The training session will comprise important sections, features, advantages, and scope of the technology in the coming years. Moreover, our qualified trainers will help you imbibe all the required skills, and information in a much better manner to help you in you becoming an expert in this technology. Post the completion of your course, you will receive a training certificate recognized world-wide.

What Make Us Tick



Career-oriented Sessions

Attend 25+ career-oriented sessions by industry mentors and prepare your career trajectory



Mock Interview Preparation

Prepare with mock interviews including most asked questions by top employers



Dedicated Job Portal Access

Get exclusive access to 100s of job postings per month on Croma Campus Intellipaat's job portal



Profile Building

Craft a resume and LinkedIn profile and make an impression on top employers



1:1 Mentoring Sessions

Get 1:1 guidance at every step in your career transition to respective Technology



Guaranteed interviews

Get job interviews with 400+ hiring partners including promising startups and top MNCs

DP 203 Data Engineering on Microsoft Azure Curriculum

Design and Implement Data Storage

- Design a Data Storage Structure
 - Design an Azure Data Lake solution
 - Recommend file types for storage
 - Recommend file types for analytical queries
 - Design for efficient querying
 - Design for data pruning
 - Design a folder structure that represents the levels of data transformation
 - Design a distribution strategy
- Design a Partition Strategy
 - Design a partition strategy for files
 - Design a partition strategy for analytical workloads
 - Design a partition strategy for efficiency/performance
 - Design a partition strategy for Azure Synapse Analytics
 - Identify when partitioning is needed in Azure Data Lake Storage Gen2
- Design the Serving Layer
 - Design star schemas
 - Design slowly changing dimensions
 - Design a dimensional hierarchy
 - Design a solution for temporal data
 - Design for incremental loading
 - Design analytical stores
 - Design meta stores in Azure Synapse Analytics and Azure Data bricks
- Implement Physical Data Storage Structures
 - Implement compression
 - Implement partitioning
 - Implement sharing
 - Implement different table geometries with Azure Synapse Analytics pools
 - Implement data redundancy
 - Implement distributions
 - Implement data archiving

- Implement Logical Data Structures
 - Build a temporal data solution
 - Build a slowly changing dimension
 - Build a logical folder structure
 - Build external tables
 - Implement file and folder structures for efficient querying and data pruning
- Implement the Serving Layer
 - Deliver data in a relational star schema
 - Deliver data in Parquet files
 - Maintain metadata
 - Implement a dimensional hierarchy

Design and Develop Data Processing

- Ingest and Transform Data
 - Transform data by using Apache Spark
 - Transform data by using Transact-SQL
 - Transform data by using Data Factory
 - Transform data by using Azure Synapse Pipelines
 - Transform data by using Stream Analytics
 - Cleanse data
 - Split data
 - Shred JSON
 - Encode and decode data
 - · Configure error handling for the transformation
 - Normalize and deformalize values
 - Transform data by using Scala
 - Perform data exploratory analysis
- Design and Develop a Batch Processing Solution
 - Develop batch processing solutions by using Data Factory, Data Lake, Spark, Azure
 - Synapse Pipelines, Polybasic, and Azure Data bricks
 - Create data pipelines
 - Design and implement incremental data loads
 - Design and develop slowly changing dimensions
 - Handle security and compliance requirements

- Scale resources
- Configure the batch size
- · Design and create tests for data pipelines
- Integrate Jupyter/Python notebooks into a data pipeline
- Handle duplicate data
- Handle missing data
- Handle late-arriving data
- Upset data
- Regress to a previous state
- Design and configure exception handling
- Configure batch retention
- Design a batch processing solution
- Debug Spark jobs by using the Spark UI
- Design and Develop a Stream Processing Solution
 - Develop a stream processing solution by using Stream Analytics, Azure Data bricks, and
 - Azure Event Hubs
 - Process data by using Spark structured streaming
 - Monitor for performance and functional regressions
 - Design and create windowed aggregates
 - Handle schema drift
 - Process time series data
 - Process across partitions
 - Process within one partition
 - Configure checkpoints/watermarking during processing
 - Scale resources
 - Design and create tests for data pipelines
 - Optimize pipelines for analytical or transactional purposes
 - Handle interruptions
 - · Design and configure exception handling
 - Upset data
 - Replay archived stream data
 - Design a stream processing solution
- Manage Batches and Pipelines
 - Trigger batches
 - Handle failed batch loads

- Validate batch loads
- Manage data pipelines in Data Factory/Synapse Pipelines
- Schedule data pipelines in Data Factory/Synapse Pipelines
- Implement version control for pipeline artefacts
- Manage Spark jobs in a pipeline

Design and Implement Data Security

- Design Security for Data Policies and Standards
 - Design data encryption for data at rest and in transit
 - Design a data auditing strategy
 - Design a data masking strategy
 - Design for data privacy
 - Design a data retention policy
 - Design to purge data based on business requirements
 - Design Azure role-based access control (Azure RBAC) and POSIX-like Access Control List
 - ACL) for Data Lake Storage Gen2
 - Design row-level and column-level security
- Implement Data Security
 - Implement data masking
 - Encrypt data at rest and in motion
 - Implement row-level and column-level security
 - Implement Azure RBAC
 - Implement POSIX-like ACLs for Data Lake Storage Gen2
 - Implement a data retention policy
 - Implement a data auditing strategy
 - Manage identities, keys, and secrets across different data platform technologies
 - Implement secure endpoints (private and public)
 - Implement resource tokens in Azure Data bricks
 - · Load a Data Frame with sensitive information
 - Write encrypted data to tables or Parquet files
 - Manage sensitive information

Monitor and Optimize Data Storage and Data Processing

- Monitor Data Storage and Data Processing
 - Implement logging used by Azure Monitor
 - Configure monitoring services
 - Measure performance of data movement
 - Monitor and update statistics about data across a system
 - Monitor data pipeline performance
 - Measure query performance
 - Monitor cluster performance
 - Understand custom logging options
 - Schedule and monitor pipeline tests
 - Interpret Azure Monitor metrics and logs
 - Interpret a Spark directed acyclic graph (DAG)
- Optimize and Troubleshoot Data Storage and Data Processing
 - Compact small files
 - Rewrite user-defined functions (UDFs)
 - Handle skew in data
 - Handle data spill
 - Tune shuffle partitions
 - Find shuffling in a pipeline
 - · Optimize resource management
 - Tune queries by using indexers
 - Tune queries by using cache
 - Optimize pipelines for analytical or transactional purposes
 - · Optimize pipeline for descriptive versus analytical workloads
 - Troubleshoot a failed spark job
 - Troubleshoot a failed pipeline run

e-Learning through LMS

Learning Management System

Our LMS (LearnPitch) is for the administration, documentation, tracking, reporting, automation, and delivery of educational courses, training programs, or learning and development programs.

Our LMS has been designed to identify training and learning gaps, using analytical data and reporting to keep you up with the class activities.

Key Features Learning Management System



Live Sessions with Class recordings



Get study material with Assignments.



Track your curriculum covered.



Track your class wise attendance



Share your feedback for Trainer & Training



Get your Training
Certificate from LMS



Training Certification

Earn Your Certificate

Your certificate and skills are vital to the extent of jump-starting your career and giving you a chance to compete in a global space.



Croma Campus! Reviews



"The most rewarding part of my experience has been achieving a prestigious certification in the subject that I love. Moreover, the training offered out by the specialists are of world-class and prepares out the students for corporate world. For me Croma Campus means a lot"

"By The Students For The Students,

Your Success Is Our Story



Rharat

I am fully satisfied with the excellent training services received by the expert staff at Croma Campus. I want to thank Croma Campus for providing me with the most innovative and affordable training services for learning all the software testing procedures and guidelines.



Ankit

It was a lifetime experience for me to get trained by IT Experts of Croma Campus. What I liked most about the training was the consistent high-quality education, which was friendly and co-active. The placement department was also proactive, they keep me updated regarding new job opportunities and provide the grooming session to crack the interview. At last, I would like to thank all faculty members of Croma Campus for their immense help and support.



Nitesh

Without any second thought, I will give Croma Campus 10/10. Their placement department is highly proactive. I remember they started scheduling interviews for me from the very next day when I told them my course has been completed. These people are doing a phenomenal job and I highly recommend Croma Campus to everyone.



Shams Khan

Croma Campus is doing a phenomenal job in the IT training industry. The reason why I decided to join their training program was that they provide quality training at very a nominal price. Plus, the online training mode was also a factor due to which I decided to join the training program of Croma Campus as I didn't want to attend physical classes.











Meet Our Team





Sales Team

Our Sales team is highly passionate, emphatic, positive attitude, great listening skills, ability to deliver quick solutions, and they are multitasker too. Our team always remains up-to-date about all the latest technologies and market trends. With effective communication skills, they always work to deliver the right information to customers when it is needed.

Product Team

Our product team is highly functional and collaborative working together to achieve the common outcome of designing exceptional digital experiences. Each of our members is a contributor to help us achieve success in long-run. Sitting at the high-end of technology and innovation, team helps to deliver high-end customer experiences and always comes out with a big idea as a game-changing plan.





Marketing Team

Our Marketing team works as gladiators and helps us to achieve business success in all possible ways. They are included in almost everything either it is building a brand, creating brand awareness, promoting products or services, delivering trailblazing customer experiences or increasing engagement at public forums. They are the true backbone of the Company.

Content Team

Our content team is responsible for ideation, creation, optimization, and distribution of content throughout the company. The team always starts its work with a strategy, how to create high-quality contents, and how to promote or share the content. Our in-house content team help us to produce all types of contents either they are educational content pieces, marketing content, SEO content, or any other forms too.





Customer Access Team

This is the team that has actually been taken up us from reactive state to a pro-active state. The team utilizes high-valued solutions to satisfy customers in all possible ways. It is truly said that no company can succeed if your customers are not satisfied. And our customer success team is dedicatedly working to keep all the customers satisfied and we always consider our customer feedback on priority.

HR Team

Our HR team is committed to provide high-end solutions to employees as they require. Our HR team has the right skills and knowledge to make sure that the HR department can always be legally and strategically successful. They know how to keep employees motivated all the time with the best HR policies and fun activities too from time to time.



Glimpse Of Our Office

Look Who We are

Our office's infrastructure comprises all the necessary software and network resources that are required to deliver IT & Design, Human Resources, Digital Marketing, and training services.

We are well-equipped with bright designed work bays for employees and managers having separate cabins with spacious cafeteria and training classrooms.

















About Croma Campus

Our Mission is to Build Nation through Education & Beyond Limitation.

Croma Campus Training & Development Private Limited is an education platform providing rigorous industry-relevant programs designed and delivered in collaboration with world-class faculty, industry & Infrastructure. In the past 12 years we have trained 18000+ candidates and out of which we are able to place 12000+ professionals in various industries successfully.



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