Build Batch Data Pipelines on Google Cloud

Category: AI, Data & Analytics | **Vendor:** Google Cloud

Duration: 1.00 hours (1 days) **0.8 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format: vILT

Course Overview

Master building and optimizing batch data pipelines on Google Cloud in this intermediate data engineering course. Learn advanced data transformation, workflow orchestration, and data pipeline optimization using Dataflow for Apache Beam and Dataproc Serverless for Apache Spark. Gain hands-on experience in data quality, monitoring, and alerting to ensure reliable and scalable ETL/ELT pipelines. Ideal for learners with basic knowledge of SQL, Python, data warehousing, and Google Cloud Platform (GCP).

About This Course

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Prerequisites & Entry Requirements

General Prerequisites:

- Basic proficiency with Data Warehousing and ETL/ELT concepts
- Basic proficiency in SQL
- Basic programming knowledge (Python recommended)
- Familiarity with Google cloud CLI and the Google Cloud console
- Familiarity with core Google Cloud concepts and services

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Determine whether batch data pipelines are the correct choice for your business use case.

Design and build scalable batch data pipelines for high-volume ingestion and transformation.

Implement data quality controls within batch pipelines to ensure data integrity.

Orchestrate, manage, and monitor batch data pipeline workflows,implementing error handling and observability using logging and monitoring tools.

Detailed Course Outline

When to choose batch data pipelines

Batch data pipelines and their use cases

Processing and common challenges

Design and build batch data pipelines

Design batch pipelines

Large scale data transformations

Dataflow and Serverless for Apache Spark

Data connections and orchestration

Execute an Apache Spark pipeline

Optimize batch pipeline performance

Control data quality in batch data pipelines

Batch data validation and cleansing

Log and analyze errors

Schema evolution for batch pipelines

Data integrity and duplication

Deduplication with Serverless for Apache Spark

Deduplication with Dataflow

Orchestrate and monitor batch data pipelines

Orchestration for batch processing

Cloud Composer

Unified observability

Alerts and troubleshooting

Visual pipeline management

Congratulations: Course summary

Frequently Asked Questions

Q: What delivery options are available for Build Batch Data Pipelines on Google Cloud?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: How many CPD hours does this course provide?

The 1-day Build Batch Data Pipelines on Google Cloud course provides up to 0.8 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Build Batch Data Pipelines on Google Cloud training?

The training takes place over 1 day(s), with each day lasting approximately 1.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Build Batch Data Pipelines on Google Cloud?

Yes, we provide corporate training, dedicated training, and closed classes for Build Batch Data Pipelines on Google Cloud. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Build Batch Data Pipelines on Google Cloud, Google Cloud, vILT

Q: Why choose Nexus Human for Build Batch Data Pipelines on Google Cloud?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Build Batch Data Pipelines on Google Cloud training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

Email: info@nexushuman.com

Website: www.nexushuman.com

Phone: +353 1 889 8700 (Ireland) | +44 20 8142 8961 (UK)

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