+33 (0)1 48 10 09 46
formation@ambient-it.net
140 Avenue Jean Lolive 93500 Pantin - France

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Sign up

GCP Training : Professional Data Engineer Certification

ALL-IN-ONE: CERTIFICATION INCLUDED IN PRICE

3 days (21 hours)

Overview

Our GCP Professional Data Engineer course is designed to equip you with the essential skills needed to create, manage and optimize large-scale data solutions on the Google Cloud Platform. Our sole aim: to ensure that you achieve certification at the end of the course.

During the course, you'll develop in-depth expertise in data engineering, exploring in detail the key features and concepts of the GCP platform.

You'll learn how to apply this knowledge in a practical way to design efficient and highly scalable data solutions.

This course will provide you with an in-depth understanding of fundamental concepts such as data storage, real-time processing and distributed data architectures.

You'll be trained to set up an optimal development environment and master the deployment of data solutions on Google Cloud. Throughout the course, we'll focus on the effective use of GCP tools and services specific to data engineering.

As with all our training courses, this one will introduce you to the latest GCP resources.

Objectives

- Gain an in-depth understanding of the data lifecycle, technical aspects and structure types
- Understand GCP services and hosted technologies
- Learn how to design and operate efficient storage systems
- Develop expertise in the design of GCP data pipelines
- Go deeper into the design and choice of data processing structure
- Obtain Google Cloud Professional Data Engineer certification

Target audience

- Cloud professionals
- Data engineers

Prerequisites

Basic knowledge of data engineering and familiarity with cloud services would be an asset.

Program of our GCP professional Data Engineer training course: Preparation for certification

Introduction

- GCP Services and IAM
- Regions and zones
- Data Lifecycle

Data storage

- Selecting storage systems
- Cloud SQL
- Cloud Spanner
- Cloud Bigtable
- Cloud Firestore
- Cloud Memorystore
- Data Lakes and Data Warehouses
- Cloud Storage
- BigQuery
- Data Lakehouse, Data Mesh, and Dataplex
- Practical workshop: creating a data warehouse with BigQuery

Data processing systems

- Dataproc

- Dataflow
- Pub/Sub and Pub/Sub Lite
- Dataprep
- Cloud Data Fusion
- Cloud Composer
- Data Catalog
- Data Transfer Services
- Data Loss Prevention
- Practical workshop: Setting up a Dataflow pipeline

Advanced solutions, management and analysis

- Data analysis and sharing
- Looker
- DialogFlow
- Resource optimization
- Security and Maintenance
- Cloud Monitoring
- Cloud Logging
- Practical workshop: Streaming data processing and operations

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced IT technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the forthcoming course, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical training: 60% hands-on, 40% theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire is used to verify the correct acquisition

skills.

Certification

A certificate will be awarded to each trainee who has completed the entire course.