# ProTech Professional Technical Services, Inc.



## Data Engineering on Google Cloud Platform

### **Course Summary**

### **Description**

This four-day instructor-led class provides you with a hands-on introduction to designing and building data processing systems on Google Cloud Platform. Through a combination of presentations, demos, and hand-on labs, you will learn how to design data processing systems, build end-to-end data pipelines, analyze data and carry out machine learning. The course covers structured, unstructured, and streaming data.

#### **Topics**

- Design and build data processing systems on Google Cloud Platform
- Process batch and streaming data by implementing autoscaling data pipelines on Cloud Dataflow
- Derive business insights from extremely large datasets using Google BigQuery
- Train, evaluate and predict using machine learning models using Tensorflow and Cloud ML
- Leverage unstructured data using Spark and ML APIs on Cloud Dataproc
- Enable instant insights from streaming data

#### **Audience**

This class is intended for experienced developers who are responsible for managing big data transformations including: Extracting, loading, transforming, cleaning, and validating data, designing pipelines and architectures for data processing, creating and maintaining machine learning and statistical models and querying datasets, visualizing query results and creating reports.

#### **Prerequisites**

Before taking this course students should have completed Google Cloud Fundamentals- Big Data and Machine Learning OR have equivalent experience have basic proficiency with common query language such as SQL, experience with data modeling, extract, transform, load activities, experience developing applications using a common programming language such Python and have familiarity with Machine Learning and/or statistics.

#### **Duration**

Four days