



16 Courses

Introduction to Data Engineering

Python for Data Science, AI & Development

Python Project for Data Engineering

Introduction to Relational Databases (RDBMS)

Databases and SQL for Data Science with Python

Hands-on Introduction to Linux Commands and Shell Scripting

Relational Database Administration (DBA)

ETL and Data Pipelines with Shell, Airflow and Kafka

Data Warehouse Fundamentals

BI Dashboards with IBM Cognos Analytics and Google Looker

Introduction to NoSQL Databases

Introduction to Big Data with Spark and Hadoop

Machine Learning with Apache Spark

Data Engineering Capstone Project

Generative AI: Elevate your Data Engineering Career

Data Engineering Career Guide and Interview Preparation



Dec 5, 2024

**Charles Bushman**

has successfully completed the online, non-credit Professional Certificate

## IBM Data Engineering

In this Professional Certificate, learners developed essential knowledge and skills to perform the many tasks in an entry-level data engineering role. By completing over a dozen courses in the program, the earner of this Professional Certificate has demonstrated a firm grasp on and practical experience with fundamentals of Relational Databases, Database Architecture, Design, & Administration, Data Warehousing, Querying databases with SQL and BI Tools, ETL with Python Programming language and Shell Scripts, NoSQL, and Big Data processing using Apache Spark. Learners have applied all these skills to complete a Capstone Project involving the design, deployment and management of a complete data engineering platform inspired by a real-world data analytics requirements scenario.

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of the learner.

Rav Ahuja, Program  
Director, IBM Skills  
Network

Verify this certificate at:

<https://coursera.org/verify/professional-certificate/XK2M5T1M5L7K>