



# Azure Data Job Oriented Program with 6 Certifications

Become a Multi-Skilled Data on Azure Cloud Professional and Land High Paying Jobs at Top Companies



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### **About K21Academy**

Founded by Mr. Atul Kumar, a seasoned Multi-Cloud and DevOps expert and author, K21Academy is a leading online training platform dedicated to empowering professionals in Cloud, DevOps, Data, and Al/ML technologies.

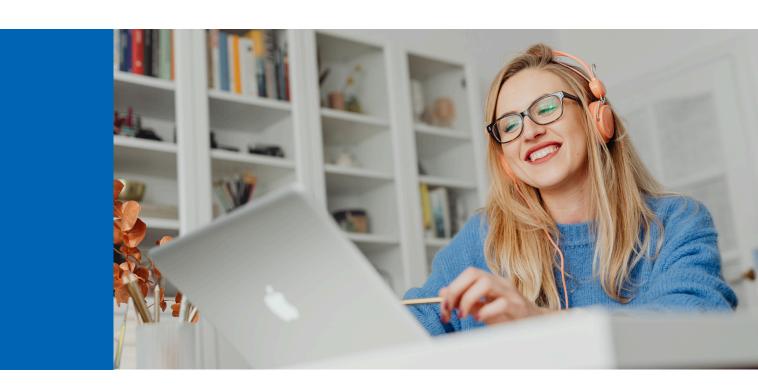
We proudly collaborate with industry leaders such as Oracle and Microsoft to deliver high-quality, industry-relevant training that keeps you ahead in today's fast-evolving tech landscape.

Our comprehensive courses cover AWS, Azure, Oracle Cloud, Google Cloud, DevOps, Kubernetes, Data Engineering, and Al/ML on AWS and Azure platforms. Crafted by experienced experts, our study materials focus on practical skills and deep knowledge aligned with the latest industry standards.

With over 45,000 successful learners who have achieved key milestones like job placements and certifications, and a thriving community of 160,000+ followers across social media, K21Academy is a trusted partner for career growth in emerging technologies.

Our expert team includes certified Cloud Engineers (AWS, Azure, Google, Oracle), DevOps & Kubernetes specialists, Data Architects, Al/ML practitioners, and Database Architects, all committed to delivering the best possible learning experience.

Ready to advance your career in Cloud, Data, or Al/ML? Explore our courses and resources at <a href="https://www.k21academy.com">www.k21academy.com</a>.





### **Meet your Mentor**



You will be mentored by Atul Kumar, the founder of K21 Academy, and his team of MultiCloud experts. Atul has over 20 years of experience in the IT industry.

He began his IT career in 2000 as an Oracle DBA/Apps DBA. The first few years were tough for him, with very little growth. However, in 2005, he transitioned to Oracle Security & IAM, and his career took off. He had a great run for the next 5-6 years, with a lot of growth and opportunity.

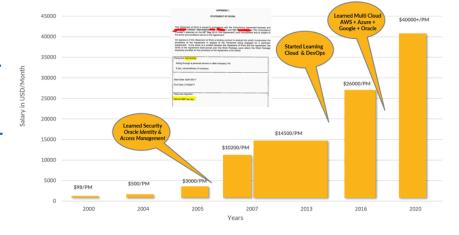
However, around 2012-13, he started to feel stuck. He wasn't learning anything new,

wasn't growing, and wasn't being challenged. At that time, the Cloud was gaining popularity, and Containers (Docker) were emerging, offering many higher-paying job opportunities in those fields.

So, he decided to make a change in his career path and transitioned from working on On-premises (Security, Infrastructure & Databases) to focusing on Cloud & DevOps. Over the next 2 years, he learned about important Cloud platforms like AWS, Azure & Oracle, as well as DevOps. He kept up with the new Cloud-based tools & technologies such as Google Cloud, Docker, Kubernetes, Terraform, Ansible, CI/CD, Jenkins, etc.

Learning Cloud & DevOps gave him the opportunity to work with some of the world's biggest and most prestigious clients such as Toyota, Royal Bank of Scotland, Worldpay, Scottish Government, NHS (United Kingdom), Saudi Railways, datAvail, Tuscan Electric (USA), Oracle, and more.

Atul's Mid-Career Crisis







The Azure Data Job-Oriented Program is a comprehensive training program that will teach you the skills you need for a variety of Azure Data roles.

This program is designed to help you prepare for your dream job in the Azure Cloud industry. We will cover the most indemand industry projects and handson labs, and we will help you with your CV, LinkedIn, and job interview preparation. You will have the opportunity to gain hands-on experience with Azure technologies by working on projects under the one-on one guidance of experienced Data experts.

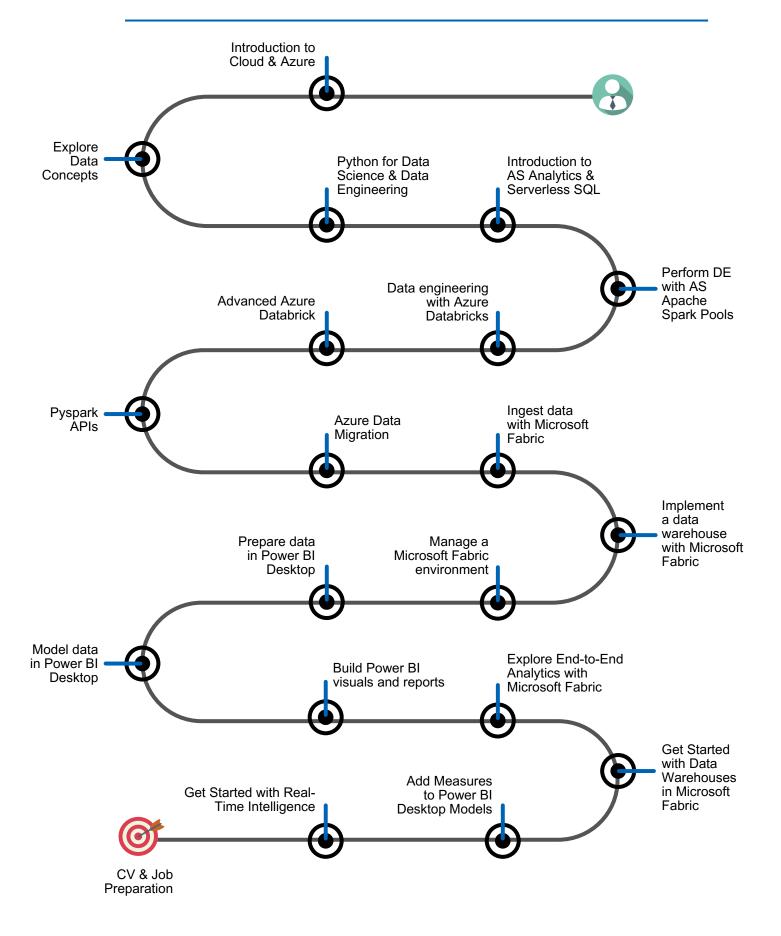
In this comprehensive program, you will acquire the skills required for various Azure Cloud Data roles, including Fabric Data Engineer, Data Analyst and more. This program will prepare you for all Azure Cloud data roles in one go. Also, you can choose any one certification from our list, and we will provide you with the necessary study materials and exam preparation kit so you can pass it.

This will give you a significant advantage when you start applying for jobs. Our team of Azure and Data experts will be there to support you every step of the way, helping you to master the skills you need for your dream job. We are here to help you succeed, and we will do everything we can to make sure you get your dream higherpaying job. To learn more about the Azure Data on Cloud Program and to enroll, schedule a free call today.





## **Course Curriculum**





# **Azure Data Job Oriented Program Course Outline**

#### **MODULE**



### Introduction to cloud and Azure

- Cloud Service Models
- · Introduction to Azure
- Azure Account and Subscription
- Azure Services

#### Hands-on-Lab

· Create Azure Free Trial Account

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### **Explore Data Concepts**

- · Explore Core Data Concepts
- · Explore Roles and Responsibilities in the world of Data
- Explore Concepts of Relational Data
- · Explore Concepts Of Non-Relational Data
- · Explore Concepts Of Data Analytics

#### Hands-on-Lab

- Explore Azure SQL Database
- · Explore Azure Storage
- Explore Azure Cosmos DB
- Explore Azure Synapse Analytics
- · Explore real-time analytics in MS Fabric
- Visualize data with Power BI

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### **Python for Data Science & Data Engineering**

- · Introduction to Python
- Objects and Python Statements (loops)
- Methods & Functions
- Object Oriented Programming (OOPs)
- Errors & Exception Handling
- NumPy & Pandas
- · Matplotlib & Plotly





### Introduction to AS Analytics & Serverless SQL

- Introduction to Azure Synapse Analytics
- · Use Azure Synapse serverless SQL pool
- Introduction to Azure Synapse Analytics
- · Create a lake DB in AZ Synapse Analytics

### Hands-on-Lab

- · Explore Azure Synapse Analytics
- · Query Files Using Serverless SQL
- Transform files using a serverless SQL Pool
- Analyze Data In Lake Database

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### **Perform DE with AS Apache Spark Pools**

- · Analyse data with Apache Spark in Az Synapse
- · Transform data Spark in AZ Synapse Analytic
- Use Delta Lake in Azure Synapse Analytics

#### Hands-on-Lab

- Analyze data in a data lake with Spark
- Transform Data: Spark in Synapse Analytics
- · Use Delta Lake with Spark in AZ Syn Analytics

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### **Data engineering with Azure Databricks**

- · Explore Azure Databricks
- Use Apache Spark in Azure Databricks
- Run AZ Databricks notebooks in AZ Data Factory

#### Hands-on-Lab

- Explore Azure Databricks
- Use Apache Spark in Azure Databricks
- Automate AZ Databricks Notebook with ADF
- Use Delta Lake in Azure Databricks
- · Use a SQL Warehouse in Azure Databricks

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### **Advanced Azure Databricks**

- · Introduction to Unity catalog
- Setup Unity Catalog
- Unity Catalog User Provisioning
- · Working with Securable objects
- · Introduction to Delta Lake
- Creating Delta Table



- · Sharing data for External Delta table
- · Reading Delta table
- · Delta table operations
- Delta table Time Travel
- · Convert Parquet to Delta
- Delta table Schema validation
- Delta table Schema evolution
- · Delta table Utilities and Optimization

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### **Pyspark APIs**

- pyspark.sql.SparkSession API operations
- pyspark.sql.dataframe API operations
- pyspark.sql.functions API operations
- pyspark.sql.GroupeDdata
- Spark structured Streaming API operations
- · Input and output bindings.
- · Triggers and Windows.
- · Watermarking and unsupported operations.

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### **Azure Data Migration**

- Introduction to Azure Migration
- Azure Database Migration Service (DMS)
- Azure Migrate
- Storage Migration Tools
- · Real-Time Data Synchronization

10

### **Ingest data with Microsoft Fabric**

- Ingest Data with Dataflows Gen2 in Microsoft Fabric
- Orchestrate processes and data movement with Microsoft Fabric
- · Use Apache Spark in Microsoft Fabric
- Get started with Real-Time Intelligence in Microsoft Fabric
- · Use real-time eventstreams in Microsoft Fabric
- · Work with real-time data in a Microsoft Fabric eventhouse

### Hands-on-Lab

- Create and use a Dataflow Gen2 in Microsoft Fabric
- · Ingest data with a pipeline
- · Analyze data with Apache Spark
- Explore Real-Time Intelligence in Fabric
- Ingest real-time data with Eventstream in Microsoft Fabric
- · Work with data in a Microsoft Fabric eventhouse



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# Implement a data warehouse with Microsoft Fabric

- Get started with data warehouses in Microsoft Fabric
- · Load data into a Microsoft Fabric data warehouse
- · Query a data warehouse in Microsoft Fabric
- Monitor a Microsoft Fabric data warehouse
- Secure a Microsoft Fabric data warehouse

### Hands-on-Lab

- · Analyze data in a data warehouse
- · Load data into a warehouse in Microsoft Fabric
- · Query a data warehouse in Microsoft Fabric
- · Monitor a data warehouse in Microsoft Fabric
- Secure a warehouse in Microsoft Fabric

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### Manage a Microsoft Fabric environment

- Implement continuous integration and continuous delivery (CI/CD) in Microsoft Fabric
- · Monitor activities in Microsoft Fabric
- · Secure data access in Microsoft Fabric
- Administer a Microsoft Fabric environment

### Hands-on-Lab

- · Implement deployment pipelines in Microsoft Fabric
- · Monitor Fabric activity in the Monitor hub
- Secure data access in Microsoft Fabric

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### Prepare data in Power BI Desktop

- Get data in Power BI
- · Clean, transform, and load data in Power BI Power Query Editor
- Design a semantic model in Power BI
- · Write DAX formulas for Power BI Desktop models
- Add measures to Power BI Desktop models

### Hands-on-Lab

· Prepare Data in Power BI Desktop





### **Model data with Power BI Desktop**

- · Design a semantic model in Power BI
- Write DAX formulas for Power BI Desktop models
- · Add measures to Power BI Desktop models
- Add Calculated tables and columns to Power BI Desktop models
- Use DAX times intelligence functions in Power BI Desktop models
- Create visuals calculations in Power BI Desktop

#### Hands-on-Lab

- Load Data in Power BI Desktop
- · Design a Data Model in Power BI
- · Design a Data Model in Power BI
- Create DAX Calculations in Power BI Desktop
- Create Advanced DAX Calculations in Power BI Desktop

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### **Build Power BI visuals and reports**

- Design Power BI
- Configure Power BI report filters
- · Enhance Power BI report designs for the user Experience
- · Perform analytics in Power BI
- Create and manage workspaces in Power BI
- · Create dashboards in Power BI
- · Implement row level security

### Hands-on-Lab

- Design a Report in Power BI Desktop
- Enhance a Report in Power BI Desktop
- Perform Data Analysis in Power BI
- · Create a Power BI Dashboard
- · Enforce Row-Level Security

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# **Explore End-to-End Analytics with Microsoft Fabric**

- · Get started with lakehouses in Microsoft Fabric
- Ingest data with Dataflows (Gen2) in Microsoft Fabric
- · Orchestrate processes and data movement
- · Use Apache Spark in Microsoft Fabric

#### Hands-on-Lab

- · Create and ingest data with a Microsoft Fabric lakehouse
- Create and use a Dataflow Gen2 in Microsoft Fabric
- · Ingest data with a pipeline
- · Analyze data with Apache Spark



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# **Get Started with Data Warehouses in Microsoft Fabric**

- Get started with data warehouses in Microsoft Fabric
- Load data into a Microsoft Fabric data warehouse
- · Query a data warehouse in Microsoft Fabric
- · Monitor a Microsoft Fabric data warehouse
- Secure a Microsoft Fabric data warehouse

### Hands-on-Lab

- · Analyze data in a data warehouse
- Load data into a data warehouse in Microsoft Fabric
- · Query a data warehouse in Microsoft Fabric
- Monitor a data warehouse in Microsoft Fabric
- Secure a Microsoft Fabric data warehouse

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### **Add Measures to Power BI Desktop Models**

- · Add measures to Power BI Desktop models
- Design scalable semantic models in Microsoft Fabric
- · Optimize a model for performance in Power BI
- · Create and manage Power BI assets
- · Enforce Power BI model security

### Hands-on-Lab

- Create DAX calculations in Power BI Desktop
- · Design scalable semantic models
- · Create reusable Power BI assets

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### **Get Started with Real-Time Intelligence**

- · Get started with Real-Time Intelligence
- Secure data access in Microsoft Fabric
- Administer Microsoft Fabric

### Hands-on-Lab

- Get started with Real-Time Intelligence in Microsoft Fabric
- Secure data access in Microsoft Fabric

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### CV, Interview Prep & LinkedIn Profile Update

- CV Preparation
- Interview Preparation
- · LinkedIn Profile Update
- · Expert tips & tricks



### **Curated Projects (Azure Data)**



Toys Sales Revenue Analysis

The Toy Sales Revenue Analysis project uses Power BI to transform sales data into actionable insights. It evaluates toy sales across categories, channels, regions, and time periods to identify trends, revenue drivers, and growth opportunities.

Transform Data using Azure Data Factory

In this Project, you will design a batch processing solution, and then you will add directories to a storage account that uses a Data Lake Storage hierarchical namespace. Next, you will deploy an Azure Data Factory, and then you will create a data pipeline. Finally, you will author a copy data activity that will transform data into a blob data file, and then you will test and publish the data pipeline.

Design dashboard with set of visualizations and DAX queries

In this project, We will cover

- KPIs for Total Miles, Revenue, Cost
- Revenue Vs Miles by Shipping State [Trend]
- Revenue Vs Miles by Shipping City [Map]
- Total Trips Vs Trips Types
- % of Trips by Shipping State
- Revenue Miles vs Total Miles



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### **Tokyo Olympics Insights**

As data engineers, we are expected to convert this raw data into information that can be interpreted by data scientists and business analysts. We need to create a power BI report that will help us gain insights about details such as:

- Gender distribution across various Olympic disciplines
- Medals distribution across the countries
- Discipline distribution across the countries

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## Formula One (F1) Insights: Data Engineering Data Pipeline

This project uses data engineering to analyze Formula One races. We'll build a system to collect race data, clean it up, and transform it to uncover hidden trends. By analyzing driver performance, car effectiveness, and track characteristics, we'll gain valuable insights to inform race strategies and improve car development.

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### **COVID-19 Data Insights using ADF & Power BI**

This project analyzes COVID-19 spread and impact across Europe in 2020 using ECDC data. Cloud tools like Azure Data Factory, HDInsight, and Databricks process and transform the data, which is stored in a SQL Data Warehouse. Key metrics include cases, deaths, hospitalizations, ICU admissions, and testing. The analytics team uses this data for insights and predictive modeling to support pandemic management.

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### **Analyse the Streaming Transportation Data**

The Project aims to analyze streaming transportation data across various regions, ethnicities, and transport modes. Need to find the process of creating a Python script to read data from a CSV file, send it to an event hub, and transform it into insights using Power BI. The importance of using SQL databases for stream analytics and members should try processing the data independently before watching the solution.



### **Features and Perks**



### **Live Interactive Sessions from Azure Experts**

Learn from the best in the industry with live sessions from Azure experts. They will share their expert tips and tricks, and answer all of your questions.



### **Industry In-Demand Projects and Hands-on Labs**

Get hands-on experience with industry in-demand projects and hands-on labs. This will give you the skills you need to succeed in the job market.



### 1 year unlimited retakes

You can rewatch the live sessions and retake the labs for up to 1 year after the program ends. This gives you plenty of time to learn and practice at your own pace.



### 1 year on-job support

Get help on your job work for 1 year after completing the program.



### WhatsApp support & ticketing system

Get help from our team of experts via WhatsApp or our ticketing system. We are always available to answer your questions.



### **Mock Interviews**

We'll also do mock interviews so you can practice.





# Master Your Chosen Certification: Study Materials and Exam Prep for Success

You can **choose any one associate level certification from our list**, and we'll provide you with the necessary study materials & exam preparation kit with multiple sample exam question set (500+ questions with explanation to answers) focused on that certification so you can pass it.

- Microsoft Certified: Azure Fundamentals [AZ-900]
- Microsoft Azure Data Fundamentals [DP-900]
- Microsoft Certified Fabric Data Engineer Associate [DP-700]
- Microsoft Power BI Data Analyst [PL-300]
- Microsoft Certified: Fabric Analytics Engineer Associate [DP-600]
- Microsoft Certified: Azure Database Administrator Associate [DP-300]



### **6 Months Money-Back Guarantee**

If you don't get the result after completing all of the activity labs and projects, you can get a full refund. To qualify for a refund, you must provide proof that you have attended sessions, completing hands-on labs & Projects, applying to at least 50 jobs & get CV Reviewed (share proof) & you feel that the program is not worth the money you invested, you will receive a full refund. (we will help you with the job search & application).



### Who is this Program for?



# The Data on Cloud Job-Oriented Program is for anyone who wants to:

- · Get a higher-paying job in the Cloud area
- · Get industry-leading guidance from top experts
- Perform industry-demanded projects and add them to their CV
- Gain hands-on experience in Cloud technologies

### Specifically, the program is for:

- IT professionals working on data (SQL Expert, Data Engineer, Data Scientist, Data Analyst, storage, databases, support, operations, or technical managers)
- Those working on other Clouds like Azure, AWS, Google, Oracle, IBM, Alibaba, SAP, VMWare, OpenStack.
- Freshers or new to IT who want to build a career in high-paying IT Cloud jobs.
- Those who are feeling stuck in their IT career (not growing) or too busy (don't have
- enough time), or would like to stay on the latest in-demand technologies for higher paid jobs.
- Those who understand that it takes investment to get to the next level.



### **Success Stories**



Vinod Walia in

Azure Data Scientist

Prompt responses and detailed teaching by K21Academy impressed me the most. I always wanted to shift to Data Science and after months of research I found K21 Academy perfect for me. I took the Azure Data Science Solution [DP-100] with K21Academy and was very much impressed with the knowledge of the trainer, the prompt responses. The study material is rightly curated for the Azure Data Science Solution and K21 strikes a right balance with the live classes and that helps you learn and understand better.



Semanti in

Azure Data Engineer

The best trainers, quality and professional teaching is what attracted me to continue Azure Data Engineer and Azure Data Fundamentals (DP900) course with K21Academy. Initially I was lagging behind but K21 cleared all our basics first and made everything easier. Even when I was searching for a job, Atul gave some very helpful suggestions. I could easily pass my Azure Data Fundamentals (DP900) exam with the study material provided by K21 Academy.



Nitya in

Data Analyst Associate

I am an MBA Finance graduate, but I wanted to combine that with my interest in Technology, as analytics would be forever. I wanted to learn more about it as it connects to all domains of careers. I had discussions with multiple platforms to choose the right one to learn Data Analyst Associate. The trainers at K21Academy are excellent, patient and have good knowledge on various topics; they help you set a good career path and provide assurance on on-job support.





### Sujatha Arunachalam in

Azure Data Engineer

I didn't have any prior knowledge of Databases or Data Analytics. I registered for the demo class and was very much inspired by Atul & the trainer. Immediately I joined Microsoft Azure Data Engineer training and received the Fundamental course as a bonus. The concepts delivered in the class by the trainer were easy to understand even though I didn't have any prior knowledge. The trainer has a thorough knowledge and delivered the content very effectively and clarified all the doubts.



Indu Shekhar in

Azure Data Engineer | DP-203

I came across a Free Masterclass by K21 Academy on the internet. It was about Data Engineering. I was highly impressed with their teaching methodology and found the class worthy. Then, I decided to enroll in the Azure Data Engineer [DP-203] training. I love the fact that Atul always asks for suggestions to improve the training and always listened carefully to our feedback and made modifications as needed. The trainer was patient, highly skilled, and knowledgeable.



Farhan Baboojee in

Azure Data Scientist

I was surprised as the training material was provided to us with study material to prepare ourselves prior to the course start. When I joined K21Academy, I was very impressed with how they choose technology to connect to students. The training provided by the trainer was excellent and in-depth for a student to grasp the concept and make sure helshe understood the theory behind an algorithm. It was a total surprise that K21Academy bundled the AI-900 course absolutely free (which was a delight).



### **Our Happy Customers**



Witness the triumph of our esteemed customers as they embark on remarkable career journeys, securing coveted roles within renowned companies. Their success stories stand as a testament to the transformative power of our educational programs, providing the skills and knowledge needed to thrive in today's competitive job market. Join our community of achievers and unlock your path to professional excellence, paving the way for a future filled with boundless opportunities and personal growth.

### #CREATEIMPACT

# THANK

www.k21academy.com

### **Need more insights?**

Speak with our Career Counsellor for a detailed overview of Data on Cloud Job Oriented Program.

Schedule a Call (>)









