



# **Data on Cloud Job Oriented Program**

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

Partners



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# About K21Academy

K21 Academy Founded by Mr. Atul Kumar, an experienced Multi-Cloud & DevOps expert, and author, we have partnered with industry leaders like Oracle (Training Partner) and Microsoft (Silver Partner).

We offer online courses on AWS, Azure, Oracle, Google, DevOps, and Kubernetes with top-notch study material.

Our study materials are comprehensive and up-to-date, covering everything you need to know about Cloud and DevOps technologies.

With over 12,000 individuals already benefiting from our training and securing higherpaying jobs, our community of over 150,000 social media followers trusts us to guide them in their careers.

Our team consists of highly skilled Azure/AWS/Google/Oracle Cloud Engineers, DevOps & Kubernetes Experts, Python & Data on Cloud Architects, and Apps DBAs/DBAs Architects who possess extensive knowledge and expertise in Cloud & DevOps technologies.

Curious to know more about us? Visit our website today www.k21academy.com





## **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.

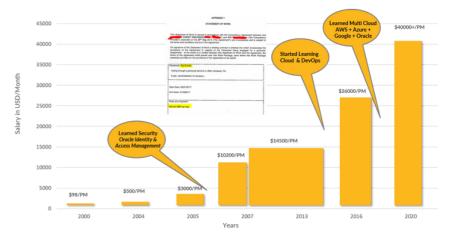
He began his IT career in 2000 as an Oracle DBA/Apps DBA. The first few years were tough for him, with very little growth. However, in 2005, he transitioned to Oracle Security & IAM, and his career took off. He had a great run for the next 5-6 years, with a lot of growth and opportunity.

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 Onpremises (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



## **About the Program**

The Data on Cloud 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.

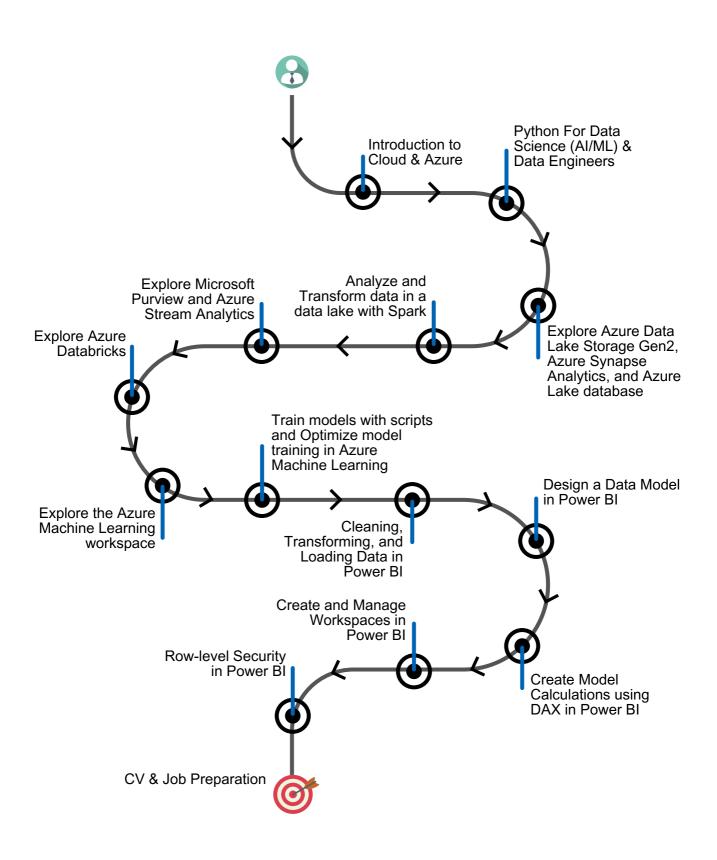
In this comprehensive program, you will acquire the skills required for various Azure Cloud Data roles, including Azure Data Engineer, Data Scientist, Data Analyst and more. This program will prepare you for all Azure Cloud data roles in one go. Also, you can choose any one certification from our list, 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**





# Data on Cloud 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



### **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

#### 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



# 4

### Get started with data engineering on Azure

- Introduction to Data Engineering on Azure
- Introduction to Azure Data Lake Storage Gen2
- · Introduction to Azure Synapse Analytics

#### Hands-on-Lab

Explore Azure Synapse Analytics

### Build data analytics solutions using Azure Synapse serverless SQL pools

- · Use Azure Synapse serverless SQL pool to query files in a data lake
- Use Azure Synapse serverless SQL pools to transform data in a data lake
- Create a lake database in Azure Synapse Analytics
- Securing access to data through using a serverless SQL pool in Azure Synapse Analytics

#### Hands-on-Lab

- · Query files using a serverless SQL pool
- Transform files using a serverless SQL pool
- · Analyze data in a lake database

## Perform data engineering with Azure Synapse Apache Spark Pools

- Analyze data with Apache Spark in Azure Synapse Analytics
- Transform data with Spark in Azure Synapse Analytics
- · Use Delta Lake in Azure Synapse Analytics

#### Hands-on-Lab

- Analyze data in a data lake with Spark
- Transform data using Spark in Synapse Analytics
- Use Delta Lake with Spark in Azure Synapse Analytics



# Work with data warehouses using Azure Synapse Analytics

- · Analyze data in a relational data warehouse
- · Load data into a relational data warehouse



#### Hands-on-Lab

- · Explore a relational data warehouse
- · Load Data into a Relational Data Warehouse

# Transfer and transform data with Azure Synapse Analytics Pipelines

- · Build a data pipeline in Azure Synapse Analytics
- · Use Spark Notebooks in an Azure Synapse Pipeline

#### Hands-on-Lab

- · Build a data pipeline in Azure Synapse Analytics
- · Use an Apache Spark notebook in a pipeline

# Work with hybrid transactional and analytical processing (HTAP) Solutions using Azure Synapse Analytics

- · Plan hybrid transactional and analytical processing
- · Implement Azure Synapse Link with Azure Cosmos DB
- Implement Azure Synapse Link for SQL

#### Hands-on-Lab

- Use Azure Synapse Link for Azure Cosmos DB
- Use Azure Synapse Link for SQL



# Implement a data streaming solution with Azure Stream Analytics

- · Get started with Azure Stream Analytics
- Ingest streaming data using Azure Stream Analytics and Azure Synapse Analytics
- · Visualize real-time data with Azure Stream Analytics and Power BI

#### Hands-on-Lab

- · Get started with Azure Stream Analytics
- Ingest realtime data with Azure Stream Analytics and Azure Synapse Analytics
- Create a realtime report with Azure Stream Analytics and Microsoft
  Power Bl



# Govern data across an enterprise and Data engineering with Azure Databricks

- Introduction to Microsoft Purview
- Integrate Microsoft Purview and Azure Synapse Analytics
- Explore Azure Databricks
- Use Apache Spark in Azure Databricks
- Run Azure Databricks notebooks in Azure Data Factory

#### Hands-on-Lab

- · Use Microsoft Purview with Azure Synapse Analytics
- Explore Azure Databricks
- · Use Spark in Azure Databricks
- Use Delta Lake in Azure Databricks
- · Use a SQL Warehouse in Azure Databricks
- Automate an Azure Databricks Notebook with Azure Data Factory



# Explore the Azure Machine Learning workspace and Work with Data

- · Explore Azure Machine Learning workspace resources and assets
- · Explore developer tools for workspace interaction
- Make data available in Azure Machine Learning

#### Hands-on-Lab

- Explore the Azure Machine Learning workspace
- · Explore developer tools for workspace interaction
- · Make data available in Azure Machine Learning
- · Work with compute resources in Azure Machine Learning
- · Work with environments in Azure Machine Learning
- Train a model with the Azure Machine Learning Designer



## Automate machine learning model selection and Train Models with Scripts in Azure Machine Learning

- · Find the best classification model with Automated Machine Learning
- Run a training script as a command job in Azure Machine Learning
- · Track model training with MLflow in jobs



#### Hands-on-Lab

- · Find the best classification model with Automated Machine Learning
- Run a training script as a command job in Azure Machine Learning
- Track model training in notebooks with MLflow
- · Use MLflow to track training jobs



# Optimize model training, Deploy and consume model with Azure Machine Learning

- · Run pipelines in Azure Machine Learning
- Perform hyperparameter tuning with Azure Machine Learning
- · Deploy a model to a managed online endpoint
- · Deploy a model to a batch endpoint

#### Hands-on-Lab

- Run pipelines in Azure Machine Learning
- · Compare and evaluate models
- Log and register models with MLflow
- Perform hyperparameter tuning with a sweep job
- · Deploy a model to a managed online endpoint
- · Deploy a model to a batch endpoint



# Get Started with Microsoft Data Analytics and Data in Power BI

- Discover Data Analysis
- · Getting Started with Power BI
- Get Data into Power BI
- Optimize Performance
- Resolve Data Errors

#### Hands-on-Lab

Get Data Into Power BI



# Cleaning, Transforming, Loading Data and Design Model in Power BI

- Shaping the data
- · Profiling the data
- . Enhance the data structure



- · Introduction to data modelling
- · Working with tables
- · Dimensions and Hierarchies

#### Hands-on-Lab

- · Clean Transform and Load Data in Power BI
- Model Data in Power BI Desktop



# **Create Model Calculations using DAX in Power BI**

- Introduction to DAX
- DAX Context
- Advanced DAX

#### Hands-on-Lab

Create DAX Calculations in Power BI Desktop



### **Optimize Model Performance, Create Reports and Dashboards in Power Bl**

- Introduction to Performance Optimization
- Design a Report
- Enhance a Report
- · Introduction to Paginated Reports
- · Advanced Analytics
- · Data Insights through AI Visuals
- Enhance a Dashboard
- Advanced Analytics
- · Data Insights through AI visuals

#### Hands-on-Lab

- Design a Report in Power BI Desktop
- Create a Power BI Dashboard
- Perform Data Analysis in Power BI Desktop





# Create and Manage Workspaces, Files and Datasets in Power BI

- Creating Workspaces
- Sharing and Managing Assets
- Dashboard
- Realtime Dashboards
- Enhance a Dashboard



### **Row-level Security in Power BI**

- Static Row Level Security
- Dynamic Row Level Security

#### Hands-on-Lab

Enforce Row-Level Security



### CV, Interview Prep & LinkedIn Profile Update

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



## **Curated Projects (Data on Cloud)**





#### **Big Data Visualization Project**

In this project, you will work with a group to design a solution for ingesting and preparing historic flight delay and weather data, and creating, training, and deploying a machine learning model that can predict flight delays.

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#### **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



# **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.



#### 1year 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 (**200+** questions with explanation to answers) focused on that certification so you can pass it.

- <u>Microsoft Azure Data Fundamentals [DP-900]</u>
- <u>Microsoft Azure Data Engineer Certification [DP-203]</u>
- Design & Implement a Data Science Solution on Azure [DP-100]
- <u>Microsoft Power BI Data Analyst [PL-300]</u>



### 60-day Money-back Guarantee

If you don't get a job offer 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 applied to at least 50 jobs (we will help you with the job search & application) and have not received an offer from any of them.



## 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 <sup>in</sup>

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 <sup>in</sup>

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<sup>in</sup>

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 <sup>in</sup>

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.



# **FEE STRUCTURE**







## # C R E A T E I M P A C T



www.k21academy.com

## **Need more insights?**

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





