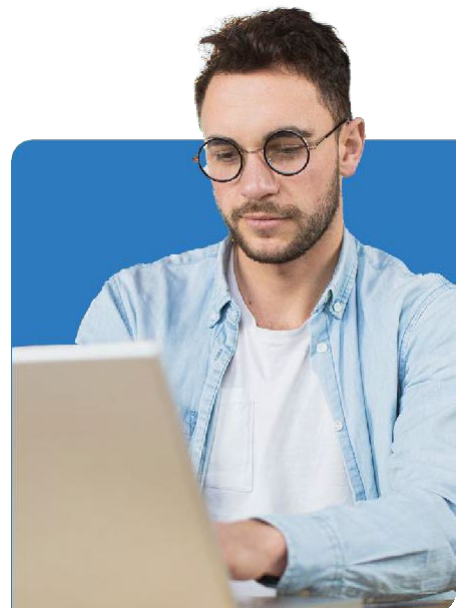


ThriveDX™

Airflow

TDXAD-107



ThriveDX Airflow

Time Commitment

5 days (total of 40 hours / 8 hours per day)

Skill Level

Professional Level

Course Category

Agile & Devops

An Airflow course typically refers to a training program or educational material designed to teach individuals about Apache Airflow, an open-source platform used for orchestrating complex workflows in data pipelines. Airflow allows users to schedule, monitor, and manage workflows, making it a powerful tool for data engineers, data scientists, and anyone involved in building and maintaining data pipelines.

Target audience

- Data Engineers:
- Data Scientists
- Data Analysts
- DevOps Engineers
- Software Engineers
- System Administrators
- Business Analysts
- Anyone Interested in Workflow Automation
- Big Data Engineers



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- Learning Engineers
 - Project Managers

In essence, Apache Airflow is a versatile tool that can be useful to a wide range of professionals involved in data processing, automation, and workflow management.

Prerequisites

To effectively study Apache Airflow, it's helpful to have a solid understanding of several key concepts and technologies. Here are the main prerequisites:

- Python Programming
- Understanding of Data ConceptsCommand Line Interface (CLI):
- Version Control Systems (e.g., Git):
- SQL
- Familiarity with Linux/Unix Systems
- Understanding of Distributed Systems
- Experience with Data Pipelines or Workflow Management

These prerequisites provide a strong foundation for understanding and working effectively with Apache Airflow. Depending on your specific use case and goals, you may need to delve deeper into certain areas. However, even with a basic understanding of these prerequisites, you can start learning and experimenting with Airflow.



TDX

Program Structure

Module 1: Introduction to Airflow

- Overview of Airflow and its use cases
- Airflow architecture and components
- Setting up Airflow on a local machine

Module 2: Creating DAGs

- Defining tasks and dependencies
- Setting up schedules and triggers
- Using variables and templates

Module 3: Operators and Hooks

- Types of operators and when to use them
- Using hooks to interact with external systems
- Creating custom operators and hooks

Module 4: Monitoring and Troubleshooting

- Using the Airflow UI to monitor DAGs
- Logging and exception handling
- Common errors and troubleshooting techniques

Module 5: Advanced Topics

- Airflow connections and authentication
- Using Airflow with Kubernetes
- Best practices and tips for scaling Airflow

Module 6: Hands-on Practice and Q&A

- Practice creating and running DAGs
- Q&A with the instructor

The ThriveDX Advantage

1 Handcrafted Training Programs

2 State-Of-The-Art Learning Materials

3 Israel's Premier Training Center

4 Fueled by Industry Leading Experts

5 Over 20 Years of Proven IT Education Success

