

Comprehensive breakdown of the **AWS Certified Data Engineer – Associate** certification, followed by a focused **7-day learning plan** to help you prepare effectively.

AWS Certified Data Engineer – Associate — Detailed Overview

1. What It Is

The **AWS Certified Data Engineer – Associate** validates your ability to build, orchestrate, and optimize data pipelines using AWS services—covering ingestion, processing, storage, and governance. ([Amazon Web Services, Inc.](#), [Credly](#))

2. Exam Details

- **Level:** Associate
- **Format:** 130 minutes, ~65 questions (both multiple choice and multiple response) ([Amazon Web Services, Inc.](#))
- **Passing Score:** Scaled score minimum of 720 out of 1000 ([d1.awsstatic.com](#))
- **Cost:** \$150 USD ([Amazon Web Services, Inc.](#))

3. Who Should Take It

Ideal for professionals with 2–3 years of data engineering or data architecture experience and 1–2 years of hands-on AWS usage. ([Amazon Web Services, Inc.](#), [Coursera](#))

4. Core Domains & Weightings

According to the **exam guide (DEA-C01)**: ([d1.awsstatic.com](#))

Domain	Weight	Focus
Domain 1: Data Ingestion & Transformation	34%	Streaming and batch ingestion using Kinesis, MSK, DMS, Glue, Lambda, EventBridge, AppFlow, etc.
Domain 2: Data Store Management	26%	Storage options and modeling with S3, Redshift, DynamoDB, RDS, and more.
Domain 3: Data Operations & Support	22%	Pipeline monitoring, troubleshooting, cost/performance optimization.
Domain 4: Data Security & Governance	18%	Encryption, IAM, data governance, logging, compliance.

5. Key Services to Know

- **Ingestion & Orchestration:** Kinesis, MSK, Glue, DMS, EventBridge, AppFlow, Airflow (MWAA), Step Functions ([Udemy](#), [d1.awsstatic.com](#))
- **Processing & Storage:** EMR (Spark), S3, Redshift & Spectrum, DynamoDB, RDS; query tools like Athena ([Udemy](#), [DataCamp](#))
- **Data Governance & Security:** IAM, KMS, Macie, Secrets Manager, CloudTrail, CloudWatch, Config ([Udemy](#), [DataCamp](#))

6. Career Value

A timely, specialized credential:

“The AWS Certified Data Engineer (Associate) certification is the most targeted for data engineers... build and manage data pipelines” ([DataCamp](#))

Some practitioners recommend coupling it with hands-on experience:

“Certifications are nice, but practical experience trumps them often.” ([Reddit](#))

“I used Skillcertpro practice tests... 70–80% of the questions on my actual exam felt very familiar.” ([Reddit](#))

7-Day Learning Plan for AWS Data Engineer – Associate

Assuming 4–5 hours of study daily, this plan mixes theory, hands-on labs, and practice.

Day 1 – Exam Framework & Domain Foundations

- Review the **exam guide**, domains, weightings, and question format. (d1.awsstatic.com)
- Explore domain scope: ingestion, storage, operations, governance.
- Begin with ingestion fundamentals: streaming vs batch, services overview.

Day 2 – Deep Dive: Data Ingestion & Transformation

- Study Kinesis, MSK, DMS, Glue, EventBridge, AppFlow, Lambda pipelines.
- Lab: Build a batch ingestion flow (S3 → Glue → transform), and a simple streaming setup using Kinesis + Lambda.

Day 3 – Data Storage & Modeling

- Explore S3 data lakes, Redshift warehouse, DynamoDB, RDS, Athena querying.
- Lab: Create S3-based data lake and query with Athena; spin up Redshift cluster and model data.

Day 4 – Orchestration, Processing & Big Data

- Learn pipeline orchestration: Step Functions, MWAA (Airflow).
- Big data processing with EMR/Spark and serverless Glue jobs.
- Lab: Orchestrate a data workflow combining Glue + Step Functions + EMR.

Day 5 – Monitoring, Performance & Cost

- Dive into CloudWatch metrics/logs, CloudTrail, cost/performance tradeoffs, optimization.
- Lab: Add monitoring to ingestion pipeline, configure alerts, review cost estimates via AWS console.

Day 6 – Security & Governance

- Review encryption (KMS), data governance (Macie), IAM roles, logging, compliance.
- Lab: Secure data pipeline end-to-end—add encryption, access control, logging.

Day 7 – Practice Testing & Review

- Take a full-length practice exam (e.g., Skillcertpro or AWS Official). ([Reddit](https://www.reddit.com))
- Review incorrect answers, revisit weak topics.
- Light revision: flashcards, cheat sheets, quick hands-on check.

Tips to Succeed

- Emphasize understanding **why** a solution fits (e.g., streaming vs batch, file format choices).
- Use courses like **Stephane Maarek's** (Udemy) or SkillBuilder hands-on labs. ([Udemy](https://www.udemy.com), [Reddit](https://www.reddit.com))
- Practice, practice, practice: Many exam questions are scenario-heavy, so timed practice tests help with pacing. ([Reddit](https://www.reddit.com))