

AWS Big Data Certification Training

simplilearn

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Program Overview:

The AWS Big Data certification training prepares you for all aspects of hosting big data and performing distributed processing on the AWS platform and has been aligned to the AWS Certified Data Analytics - Specialty exam. This course is developed by industry leaders and aligned with the latest best practices.

Program Features:

- > 4.9 hours of online self-paced learning
- > 44 hours of instructor-led online training
- > Four industry-based course-end projects
- > Interactive learning with Jupyter notebooks integrated labs
- > Dedicated mentoring session from our industry expert faculty members

Delivery Mode:

Blended - Online self-paced learning and live virtual classroom

Prerequisites:

It is recommended that participants in this AWS Big Data Certification online course have:

- > Basic knowledge of AWS technical essentials
- > Fair understanding of big data and Hadoop concepts

Key Learning **Outcomes:**

>

Course Curriculum:

Lesson 01 - AWS in Big Data introduction

- > Introduction to Cloud Computing
- > Cloud Computing Deployments Models
- > Amazon Web Services Cloud Platform
- > The Cloud Computing Difference
- > AWS Cloud Economics
- > AWS Virtuous Cycle
- > AWS Cloud Architecture Design Principles
- > Why AWS for Big Data - Reasons
- > Why AWS for Big Data - Challenges
- > Databases in AWS
- > Relational vs Non-Relational Databases
- > Data Warehousing in AWS
- > Services for Collecting, Processing, Storing, and Analyzing Big Data
 1. Amazon Redshift
 2. Amazon Kinesis
 3. Amazon EMR
 4. Amazon DynamoDB
 5. Amazon Machine Learning
 6. AWS Lambda
 7. Amazon Elasticsearch Service
 8. Amazon EC2 (big data analytics software on EC2 instances)
- > Amazon Redshift
- > Amazon Kinesis
- > Amazon EMR
- > Amazon DynamoDB
- > Amazon Machine Learning
- > AWS Lambda
- > Amazon Elasticsearch Service
- > Amazon EC2 (big data analytics software on EC2 instances)
- > Key Takeaway
- > Knowledge Checks
- > Lesson End Project

Lesson 02 - Collection

- > Objectives
- > Amazon Kinesis Fundamentals
- > Loading Data into Kinesis Stream
- > Kinesis Data Stream High-Level Architecture
- > Kinesis Stream Core Concepts
- > Kinesis Stream Emitting Data to AWS Services
- > Kinesis Connector Library
- > Kinesis Firehose
- > Transferring Data Using Lambda
- > Amazon SQS
- > IoT and Big Data
- > IoT Framework
- > AWS Data Pipeline
- > AWS Data Pipeline Components
- > Key Takeaway
- > Knowledge Checks
- > Lesson End Project

Lesson 03 - Storage

- > Objectives
- > Introduction to AWS Big Data Storage Services
- > Amazon Glacier
- > Glacier and Big Data
- > DynamoDB Introduction
- > The Architecture of the DynamoDB Table
- > DynamoDB in AWS Ecosystem
- > DynamoDB Partitions
- > Data Distribution
- > Local Secondary Index (LSI) **
- > Global Secondary Index (GSI) **
- > DynamoDB GSI vs LSI
- > DynamoDB Stream
- > Cross-Region Replication in DynamoDB
- > Partition Key Selection
- > Snowball & AWS Big Data
- > AWS DMS
- > AWS Aurora in Big Data
- > Key Takeaway
- > Knowledge Checks
- > Lesson End Project

Lesson 04 - Processing I

- > Objectives
- > Introduction to AWS Big Data Processing Services
- > Amazon Elastic MapReduce (EMR)
- > Apache Hadoop
- > EMR Architecture
- > Storage Options
- > EMR File Storage and Compression
- > Supported File Format and File Size
- > Single-AZ Concept
- > EMR Operations
- > EMR Releases
- > AWS Cluster
- > Launching a Cluster
- > Advanced EMR Setting Option
- > Choosing Instance Type
- > Number of Instances
- > Monitoring EMR
- > Resizing of Cluster
- > Using Hue with EMR
- > Setup Hue for LDAP
- > Hive on EMR
- > Hive Use Cases
- > Key Takeaway
- > Knowledge Checks
- > Lesson End Project

Lesson 05 - Processing II

- > HBase with EMR
- > HBase Use Cases
- > Comparison of HBase with Redshift and DynamoDB
- > HBase Architecture HBase on S3
- > HBase and EMRFS
- > HBase Integration
- > HCatalog
- > Presto with EMR
- > Advantages of Presto
- > Presto Architecture
- > Spark with EMR
- > Spark Use Cases
- > Spark Components
- > Spark Integration With EMR
- > AWS Lambda in AWS Big Data Ecosystem
- > Limitations of Lambda
- > Lambda and Kinesis Stream
- > Lambda and Redshift
- > Key Takeaway
- > Knowledge Checks
- > Lesson End Project

Lesson 06 - Analysis I

- > Objectives
- > Introduction to AWS Big Data Analysis Services
- > RedShift
- > RedShift Architecture
- > RedShift in the AWS Ecosystem
- > Columnar Databases
- > RedShift Table Design
- > RedShift Workload Management
- > RedShift Loading Data
- > RedShift Maintenance and Operations
- > Key Takeaway
- > Knowledge Checks
- > Lesson End Project

Lesson 07 - Analysis II

- > Machine Learning
- > Machine Learning - Use Cases
- > Algorithms
- > Amazon SageMaker
- > Elasticsearch
- > Amazon Elasticsearch Service
- > Loading of Data into Elasticsearch
- > Logstash
- > Kibana
- > RStudio
- > Characteristics
- > Athena
- > Presto and Hive
- > Integration with AWS Glue
- > Comparison of Athena with Other AWS Services
- > Lab Run Query on S3 Using Serverless Athena
- > Key Takeaway
- > Knowledge Checks
- > Lesson End Project

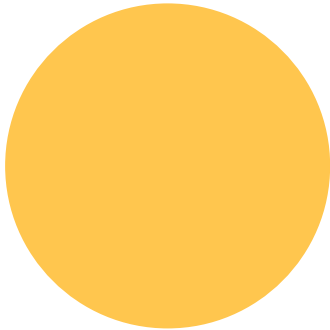
Lesson 08 - Visualisation

- > Objectives
- > Introduction to AWS Big Data Visualization Services
- > Amazon QuickSight
- > Amazon QuickSight - Use Cases
- > LAB Create an Analysis with a Single Visual Using Sample Data
- > Working with Data
- > Assisted Practice: TBD
- > QuickSight Visualization
- > Big Data Visualization
- > Apache Zeppelin
- > Jupyter Notebook
- > Comparison Between Notebooks
- > D3.js (Data-Driven Documents)
- > MicroStrategy
- > Key Takeaway
- > Knowledge Checks
- > Lesson End Project

Lesson 09 - Security

- > Objectives
- > Introduction to AWS Big Data Security Services
- > EMR Security
- > Roles
- > Private Subnet
- > Encryption At Rest and In Transit
- > RedShift Security
- > KMS Overview
- > SloudHSM
- > Limit Data Access
- > STS and Cross Account Access
- > Cloud Trail
- > Key Takeaway
- > Knowledge Checks
- > Lesson End Project

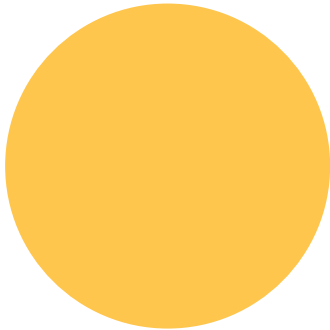
Customer **Reviews:**



Ajinkya Gavi

Associate at Cognizant

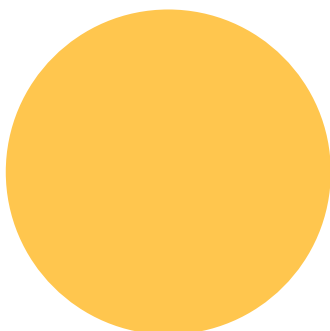
I joined Simplilearn to explore more about the upcoming Technology. Just 1 month of course along with sufficient practice landed me a job in a Top IT MNC. I never thought an experienced person can start as fresher in Bigdata, but Simplilearn made it happen. Thank you Simplilearn.



Angiras Modak

IIM Bangalore, Executive Management

Simplilearn's Big Data course prepared me with the skills to get ahead in my career. The course helped me to enhance my career from Senior Associate to Program Operations Manager at Sapient within 1 year of completing the course.



Md Azhar Hussain

This platform has enhanced my knowledge of big data and provided me the opportunity to work with experienced industry professionals. I appreciate the tutor's in-depth knowledge and, the help and support provided by Simplilearn. After the certification, I was able to grab a role change.

About Us:

Simplilearn is the world's #1 online bootcamp provider that enables learners through rigorous and highly specialized training. We focus on emerging technologies and processes that are transforming the digital world, at a fraction of the cost and time as traditional approaches. Over one million professionals and 2000 corporate training organizations have harnessed our award-winning programs to achieve their career and business goals.

For more information, please visit our website:

<https://www.simplilearn.com/aws-big-data-certification-training-course>



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Simplilearn is the world's #1 online bootcamp for digital economy skills training focused on helping people acquire the skills they need to thrive in the digital economy.

We provide rigorous online training in disciplines such as Cyber Security, Cloud Computing, Project Management, Digital Marketing, and Data Science, among others. In other words, we specialize in areas where technologies and best practices are changing rapidly, and the demand for qualified candidates significantly exceeds supply.

Based in San Francisco, California, and Bangalore, India, we have helped over one million professionals, and companies across 150+ countries get trained, acquire certifications, and upskill their employees.

Our award-winning online bootcamps are designed and updated by 2000+ renowned industry and academic experts. Through individual courses, comprehensive certification programs, and partnerships with world-renowned universities, we provide millions of professionals and thousands of corporate training organizations with the work-ready skills they need to excel in their careers. Our practical and applied approach has resulted in 85 percent of learners getting promotions or new jobs on day one. With over 1,000 live classes each month, real-world projects, and more, professionals learn by doing at Simplilearn.

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