



**AWS Certified
Developer - Associate**



Learning Collaborations



Global Certifications



About the **AWS Certified Developer Program**

Our AWS Certified Developer - Associate course is specifically designed for new aspirants who are planning to enter into the field of Cloud Computing and AWS and intend to gain the official AWS Developer - Associate certification.

We start this course from absolute scratch and hence there is no prior knowledge required about Cloud or AWS. Once the basics of Cloud Computing are understood, then the journey begins into AWS to master various aspects related to new cloud paradigms such as Server-less, which makes this certification incredibly valuable to have and pass. Post completing this course, the candidate will have a solid base understanding of AWS Development Services.

Course outcome for **AWS Certified Developer Program**

- The AWS Fundamentals: IAM, EC2, Load Balancing, Auto Scaling, EBS, Route 53, RDS, ElastiCache, S3
- The AWS CLI: CLI setup, usage on EC2, best practices, SDK, advanced usage
- Properly deploy an application: AWS Elastic Beanstalk, CICD, CodeCommit, CodePipeline, CodeBuild, CodeDeploy
- Infrastructure as code with AWS CloudFormation
- Monitoring, Troubleshooting & Audit: AWS CloudWatch, X-Ray, CloudTrail
- AWS Integration & Messaging: SQS, SNS, Kinesis
- AWS Serverless: AWS Lambda, DynamoDB, API Gateway, Cognito, Serverless Application Model (SAM)
- ECS, ECR & Fargate: Docker in AWS
- Best practices: KMS, Encryption SDK, SSM Parameter Store, IAM Policies
- AWS Other Services Overview: CloudFront, Step Functions, SWF, Redshift

Prerequisites for **AWS Certified Developer Associate**

- Know the basics of programming (functions, environment variables, CLI & JSON)
- No AWS cloud experience is necessary, we'll use the AWS Free Tier
- Windows / Linux / Mac OS X Machine

Modules covered under AWS Certified Developer - Associate

Module 1: Introduction to AWS Certified Developer - Associate

- Course Introduction - AWS Certified Developer Associate
- Create your AWS Account

Module 2: Getting started with AWS

- AWS Cloud Overview
- *Tour of the AWS Console & Services in AWS*
- *About the UI changes in the course*

Module 3: IAM & AWS CLI

- IAM Introduction: Users, Groups, Policies
- IAM Users & Groups Hands On
- IAM Policies
- IAM MFA Overview
- AWS Access Keys, CLI and SDK
- AWS CLI Setup on Windows
- AWS CLI Setup on Mac OS X
- AWS CLI Setup on Linux
- AWS CloudShell: Region Availability
- AWS CloudShell
- IAM Roles for AWS Services
- IAM Security Tools
- IAM Best Practices
- IAM Summary

Modules covered under AWS Certified Developer - Associate

Module 4: EC2 Fundamentals

- AWS Budget Setup
- EC2 Basics
- Create an EC2 Instance with EC2 User Data to have a Website Hands On
- EC2 Instance Types Basics
- Security Groups & Classic Ports Overview
- Security Groups Hands On
- SSH Overview
- How to SSH using Linux or Mac
- How to SSH using Windows
- How to SSH using Windows 10
- EC2 Instance Connect
- EC2 Instance Roles Demo
- EC2 Instance Purchasing Options

Module 5: EC2 Instance Storage

- EBS Overview
- EBS Snapshots
- AMI Overview
- AMI Hands On
- EC2 Instance Store
- EBS Volume Types
- EBS Multi-Attach
- Amazon EFS
- EFS vs EBS
- EBS & EFS - Section Cleanup

Modules covered under AWS Certified Developer - Associate

Module 6 : AWS Fundamentals: ELB + ASG

- High Availability and Scalability
- Elastic Load Balancing (ELB) Overview
- Classic Load Balancer (CLB)
- Application Load Balancer (ALB)
- Network Load Balancer (NLB)
- Gateway Load Balancer (GWLB)
- Elastic Load Balancer - Sticky Sessions
- Elastic Load Balancer - Cross Zone Load Balancing
- Elastic Load Balancer - SSL Certificates
- Elastic Load Balancer - Connection Draining
- Auto Scaling Groups (ASG) Overview
- Auto Scaling Groups - Scaling Policies

Module 7 : AWS Fundamentals: RDS + Aurora + ElastiCache

- Amazon RDS Overview
- RDS Read Replicas vs Multi AZ
- Amazon RDS Hands On
- RDS Encryption + Security
- Amazon Aurora
- Amazon Aurora - Hands On
- ElastiCache Overview
- ElastiCache Hands On
- ElastiCache Strategies
- ElastiCache Redis Cluster Modes

Modules covered under AWS Certified Developer - Associate

Module 8: Route 53

- What is a DNS?
- Route 53 Overview
- Route 53 - Registering a domain
- Route 53 - Creating our first records
- Route 53 - EC2 Setup
- Route 53 - TTL
- Route 53 CNAME vs Alias
- Routing Policy - Simple
- Routing Policy - Weighted
- Routing Policy - Latency
- Route 53 Health Checks
- Routing Policy - Failover
- Routing Policy - Geolocation
- Routing Policy - Geoproximity
- Routing Policy - Multi Value
- 3rd Party Domains & Route 53
- Route 53 - Section Cleanup

Module 9: VPC Fundamentals

- VPC Fundamentals - Section Introduction
- VPC, Subnets, IGW and NAT
- NACL, SG, VPC Flow Logs
- VPC Peering, Endpoints, VPN, DX
- VPC Cheat Sheet & Closing Comments
- Three Tier Architecture

Modules covered under AWS Certified Developer - Associate

Module 10 : Amazon S3 Introduction

- Amazon S3 - Section Introduction
- S3 Buckets and Objects
- S3 Versioning
- S3 Versioning - Hands On
- S3 Encryption
- S3 Encryption - Hands On
- S3 Security & Bucket Policies
- S3 Bucket Policies Hands On
- S3 Websites
- S3 CORS
- S3 CORS Hands On
- S3 Consistency Model

Module 11 : AWS CLI, SDK, IAM Roles & Policies

- IAM Roles and Policies Hands On
- AWS Policy Simulator
- AWS CLI Dry Run
- AWS CLI STS Decode
- AWS EC2 Instance Metadata
- AWS CLI Profiles
- AWS CLI with MFA
- AWS SDK Overview
- Exponential Backoff & Service Limit Increase
- AWS Credentials Provider & Chain
- AWS Signature v4 Signing

Modules covered under AWS Certified Developer - Associate

Module 12 : Advanced S3 & Athena

- S3 MFA Delete
- S3 Default Encryption
- S3 Access Logs
- S3 Replication (Cross Region and Same Region)
- S3 Replication - Hands On
- S3 Pre-signed URLs
- S3 Pre-signed URLs - Hands On
- S3 Storage Classes + Glacier
- S3 Storage Classes + Glacier - Hands On
- S3 Lifecycle Rules
- S3 Lifecycle Rules - Hands On
- S3 Performance
- S3 & Glacier Select
- S3 Event Notifications
- Athena Overview
- Athena Hands On

Module 13 : CloudFront

- CloudFront - Overview
- CloudFront Caching & Caching Invalidations - Hands On
- CloudFront Caching & Invalidations Hands On
- CloudFront Security
- CloudFront Signed URL / Cookies
- CloudFront Signed URL - Key Groups + Hands On
- CloudFront Advanced Concepts

Modules covered under AWS Certified Developer - Associate

Module 14 : ECS, ECR & Fargate - Docker in AWS

- Docker Introduction
- Amazon ECS
- Amazon ECS - Auto Scaling
- Amazon ECS - Rolling Updates
- Amazon ECS - Solutions Architectures
- Amazon ECS Task Definitions - Deep Dive
- Amazon ECS - Task Placements
- Amazon ECR
- Amazon EKS

Module 15 : AWS Elastic Beanstalk

- AWS Elastic Beanstalk - Section Introduction
- Elastic Beanstalk Overview (High level)
- Beanstalk First Environment
- Beanstalk Second Environment
- Beanstalk Deployment Modes
- Beanstalk CLI and Deployment Process
- Beanstalk Lifecycle Policy Overview + Hands On
- Beanstalk Extensions
- Beanstalk & Cloud Formation
- Beanstalk Cloning
- Beanstalk Migrations
- Beanstalk with Docker
- Beanstalk Advanced Concepts
- Beanstalk Cleanup

Modules covered under AWS Certified Developer - Associate

Module 16 : AWS CICD: CodeCommit, CodePipeline, CodeBuild, CodeDeploy

- AWS CICD - Section Introduction
- Introduction to CICD in AWS
- CodeCommit Overview
- CodeCommit Hands On
- CodePipeline Overview
- CodePipeline Hands On
- CodeBuild Overview
- CodeBuild Hands On
- CodeDeploy Overview
- CodeDeploy Hands On
- CodeDeploy for EC2 and ASG

Module 17 : AWS CloudFormation

- AWS CloudFormation - Section Introduction
- CloudFormation
- YAML Crash Course
- CloudFormation Resources
- CloudFormation Parameters
- CloudFormation Mappings
- CloudFormation Outputs
- CloudFormation Conditions
- CloudFormation Intrinsic Functions
- CloudFormation Rollbacks
- CloudFormation ChangeSets, Nested Stacks & StackSet
- CloudFormation Drift

Modules covered under AWS Certified Developer - Associate

Module 18 : AWS Monitoring & Audit: CloudWatch, X-Ray and CloudTrail

- AWS Monitoring - Section Introduction
- Monitoring Overview in AWS
- CloudWatch Metrics
- CloudWatch Custom Metrics
- CloudWatch Logs
- CloudWatch Logs Hands On
- CloudWatch Agent & CloudWatch Logs Agent
- CloudWatch Logs Metric Filters
- CloudWatch Alarms
- CloudWatch Alarms Hands On
- CloudWatch Events
- Amazon EventBridge
- Amazon EventBridge - Hands On
- X-Ray Overview
- X-Ray Hands On
- X-Ray: Instrumentation and Concepts
- X-Ray: Sampling Rules
- X-Ray APIs
- X-Ray with Beanstalk
- X-Ray & ECS
- CloudTrail
- CloudTrail Hands On
- CloudTrail vs CloudWatch vs X-Ray
- AWS Quick Clean-Up

Modules covered under AWS Certified Developer - Associate

Module 19 : AWS Integration & Messaging: SQS, SNS & Kinesis

- AWS Integration & Messaging - Section Introduction
- Introduction to Messaging
- Amazon SQS - Standard Queues Overview
- SQS - Standard Queue Hands On
- SQS Queue Access Policy
- SQS - Message Visibility Timeout
- SQS - Dead Letter Queues
- SQS - Delay Queues
- SQS - Certified Developer concepts
- SQS - FIFO Queues
- SQS - FIFO Queues Advanced
- Amazon SNS
- Amazon SNS and SQS - Fan Out Pattern
- Kinesis Overview
- Kinesis Data Streams Overview
- Kinesis Producers
- Kinesis Consumers
- Kinesis Data Streams Hands On
- Kinesis Client Library
- Kinesis Operations
- Kinesis Data Firehose Overview
- Kinesis Data Firehose Hands On
- Kinesis Data Analytics
- SQS vs SNS vs Kinesis
- Data Ordering for Kinesis vs SQS FIFO

Modules covered under **AWS Certified Developer - Associate**

Module 20 : AWS Serverless: Lambda

- AWS Lambda - Section Introduction
- Serverless Introduction
- AWS Lambda Overview
- Lambda Synchronous Invocations
- Lambda & Application Load Balancer
- AWS Lambda@Edge Overview
- Lambda Asynchronous Invocations & DLQ
- Lambda & CloudWatch Events / EventBridge
- Lambda & S3 Event Notifications
- Lambda Event Source Mapping
- Lambda Event Source Mapping Hands On (SQS)
- Lambda Destinations
- Lambda Permissions - IAM Roles & Resource Policies
- Lambda Environment Variables
- Lambda Monitoring & X-Ray Tracing
- Lambda in VPC
- Lambda Function Performance
- Lambda Concurrency
- Lambda External Dependencies
- Lambda and CloudFormation
- Lambda Layers
- Lambda Container Images
- Lambda Versions and Aliases
- Lambda and CodeDeploy
- Lambda Limits
- Lambda Best Practices

Modules covered under AWS Certified Developer - Associate

Module 21 : AWS Serverless: DynamoDB

- DynamoDB - Section Introduction
- DynamoDB Overview
- DynamoDB Basics - Hands On
- DynamoDB WCU & RCU - Throughput
- DynamoDB WCU & RCU - Hands On
- DynamoDB Basic APIs
- DynamoDB Basic APIs - Hands On
- DynamoDB Indexes (GSI + LSI)
- DynamoDB Indexes (GSI + LSI) - Hands On
- DynamoDB PartiQL
- DynamoDB Optimistic Locking
- DynamoDB DAX
- DynamoDB DAX - Hands On
- DynamoDB Streams
- DynamoDB Streams - Hands On
- DynamoDB TTL
- DynamoDB CLI
- DynamoDB Transactions
- DynamoDB Session State
- DynamoDB Partitioning Strategies
- DynamoDB Conditional Writes, Concurrent Writes & Atomic Writes
- DynamoDB Patterns with S3
- DynamoDB Operations
- DynamoDB Security & Other

Modules covered under AWS Certified Developer - Associate

Module 22 : AWS Serverless: API Gateway

- API Gateway - Section Introduction
- AWS API Gateway Overview
- API Gateway Basics Hands On
- API Gateway Stages and Deployment
- API Gateway Stages Configurations Hands On
- API Gateway Canary Deployments
- API Gateway Integration Types & Mappings
- API Gateway Mapping Templates Hands On
- API Gateway Swagger & Open API 3.0
- API Gateway Caching
- API Gateway Usage Plans & API Keys
- API Gateway Monitoring, Logging and Tracing
- API Gateway CORS & Hands On
- API Gateway Authentication and Authorization
- API Gateway REST API vs HTTP API
- API Gateway Websocket API
- API Gateway - Architecture

Module 23 : Cloud Development Kit (CDK)

- CDK Overview
- CDK Hands On

Modules covered under AWS Certified Developer - Associate

Module 24 : Cognito: Cognito User Pools, Cognito Identity Pools & Cognito Sync

- Cognito Overview
- Cognito User Pools
- Cognito User Pools Hands On
- Cognito User Pools - Others
- Cognito Identity Pools
- Cognito Identity Pools Hands On
- Cognito User Pools vs Cognito Identity Pools
- Cognito Sync

Module 25 : Other Serverless: Step Functions & AppSync

- Step Functions Overview
- Step Functions - Hands On
- Step Functions - Error Handling
- Step Functions - Error Handling Hands On
- Step Functions - Standard vs Express
- AppSync Overview
- AppSync Hands On
- AWS Amplify
- AWS Amplify - Hands On

Module 26 : Advanced Identity

- STS Overview
- Advanced IAM
- Granting a User Permissions to Pass a Role to an AWS Service
- AWS Directory Services

Modules covered under AWS Certified Developer - Associate

Module 27 : AWS Security & Encryption: KMS, Encryption SDK, IAM & STS

- AWS Security - Section Introduction
- Encryption 101
- KMS Overview
- KMS Hands On w/ CLI
- KMS Encryption Patterns and Envelope Encryption
- Encryption SDK CLI Hands On
- KMS Limits
- KMS and AWS Lambda Practice
- S3 Security Advanced
- S3 Bucket Key
- SSM Parameter Store Overview
- SSM Parameter Store Hands On (CLI)
- SSM Parameter Store Hands On (AWS Lambda)
- Secrets Manager - Overview
- Secrets Manager - Hands On
- SSM Parameter Store vs Secrets Manager
- CloudWatch Logs Encryption
- CodeBuild Security

Module 28 : Projects And Interviews

- Covering all the concepts
- Project Work
- Resume Preparation
- Interview Question Preparation

Benefits as AWS Certified Developer Program



Our Training Benefits as AWS Certified Developer Program

- Our complete training is constructed as per the current industry standard.
- Live Project & Industrial Based Training.
- One of the biggest team of Certified Expert & Competent Trainers.
- Easy to understand study material.
- Regular and Weekends classes for IT & Software training is provided.
- Interaction, analysis and case studies are an integral part of the training.
- Smart Labs with Real Latest Equipments.
- Students are free to access the labs for an unlimited number of hours
- Free Study Material, e-PDFs, Video Trainings, Sample Questions.
- Globally Recognized Course Completion Certificate.
- The ability to retake the class at no-charge as often as desired.
- One-on-One attention from instructors.
- Helps students to take knowledge of complex technical concepts.
- Post Training Support will help the students.
- Personality Development & Interview Preparation classes.
- 100% Job Assistance with dedicated training & placement team.



Join One of the Best AWS Developer Training Institute in India

(In-Class & Live Online Training by Industry Experts)



5740+
Batches Completed



68806+
Students Trained



470+
Skilled Instructors



Our Latest Reviews



Hi All, I am Shilpa and i have done my Certification from TechVidya. The study environment is good and trainers are full of knowledge. I personally recommend TechVidya Institute to all the students who looking for quality education and sincere about there future.

I am grateful to TechVidya - both the faculty and the Training & Placement Department. They've made efforts ensuring maximum number of placed students. The Institute started grooming us for placements in the first few months including courses such as Professional Excellence Program and Professional Skills Enhancement. I suggest to join TechVidya which comes under top 10 IT & Software training institute.



Hi I am Amit Kumar and my Enrollment ID with TechVidya is TV230967. I completed my Certification from TechVidya. They provides IT & Software courses in more practical & real scenario basis. Complete project based training help me to sharpen my technical skills.

TechVidya has always believed in helping and guiding its students and it was no different during the placement time. Regular classes held to help us with our aptitude and technical skills. Recommend to all the students who looking for best computer classes with quality education. Thanks TechVidya for explore my career.



RECORD BREAKING PLACEMENTS 100% JOB PLACEMENT ASSISTANCE

MEET OUR PLACED STUDENTS



Anand Pandey
Newgen



Sumi Singh
R Systems



Baldev Singh
Star Solutions



Meenakshi
Chetu India



Neha Bisht
PayTM



Jeewan Singh
Aavishkar Ent.



Prem Prakash
MPS Limited



Career Assistance Services



-  **Career Oriented Sessions**  Throughout the Course
-  **Resume & LinkedIn Profile Building**  After 70% of the Course Completion
-  **Mock Interview Preparation**  After 80% of the Course Completion

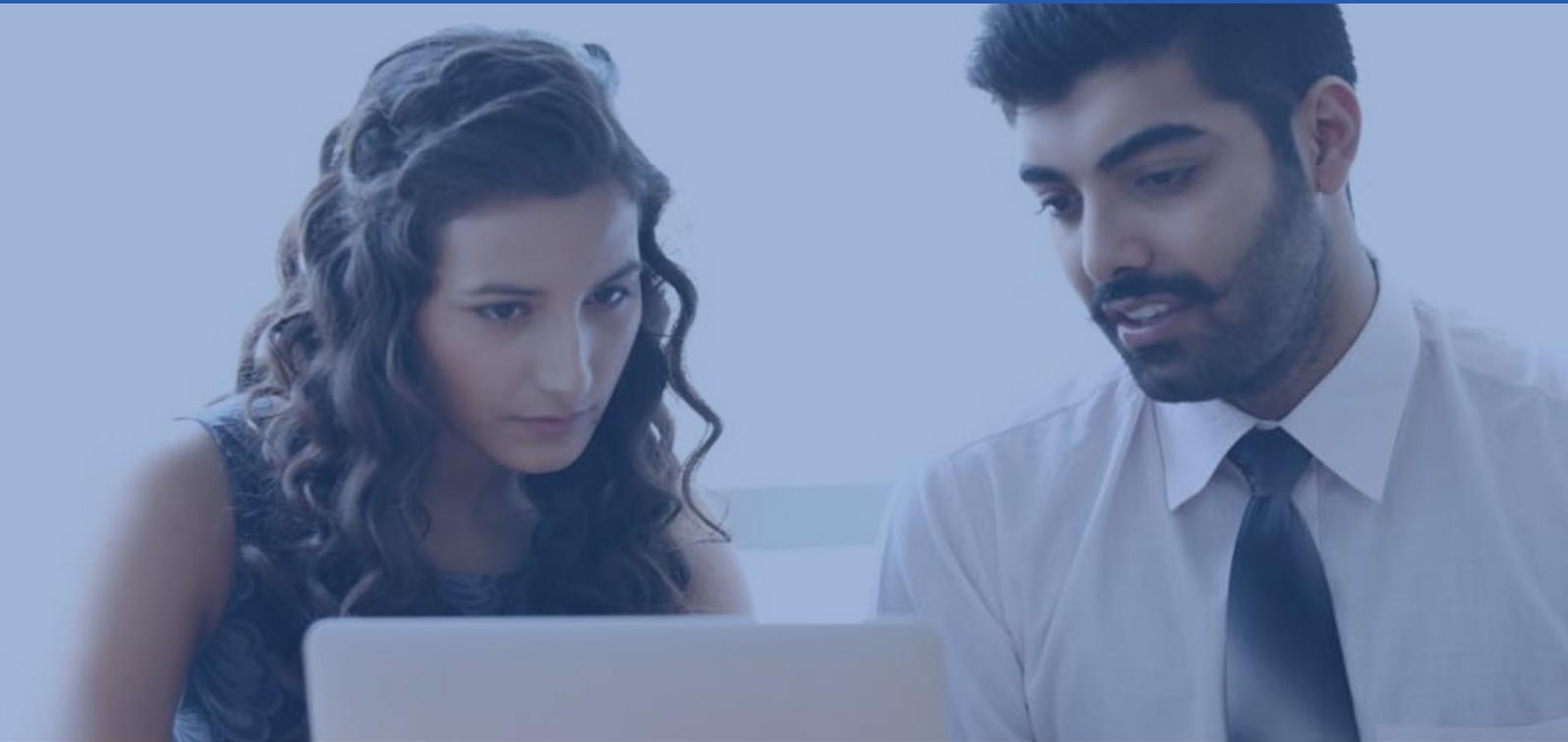
-  **1 on 1 Career Mentoring Sessions**  After 90% of the Course Completion
-  **Assured Interviews**  After 90% of the Course Completion
-  **1 Year Placement Assistance**  After 100% of the Course Completion





Our Top Placement Partners





TechVidya In News



08-Jan

ET Now- Startup Central

TIMESNOWNEWS.COM

22-Dec

What skills in demand & how should upgrade?

THE HINDU
BusinessLine

14-Nov

Turning executive education into class act

EducationTIMES
EST. ESTABLISHED

30-Sep

TechVidya Campaign
#StayUpdatedStayAhead

YOUR
STORY

02-Sep

How TechVidya enhance learning experience

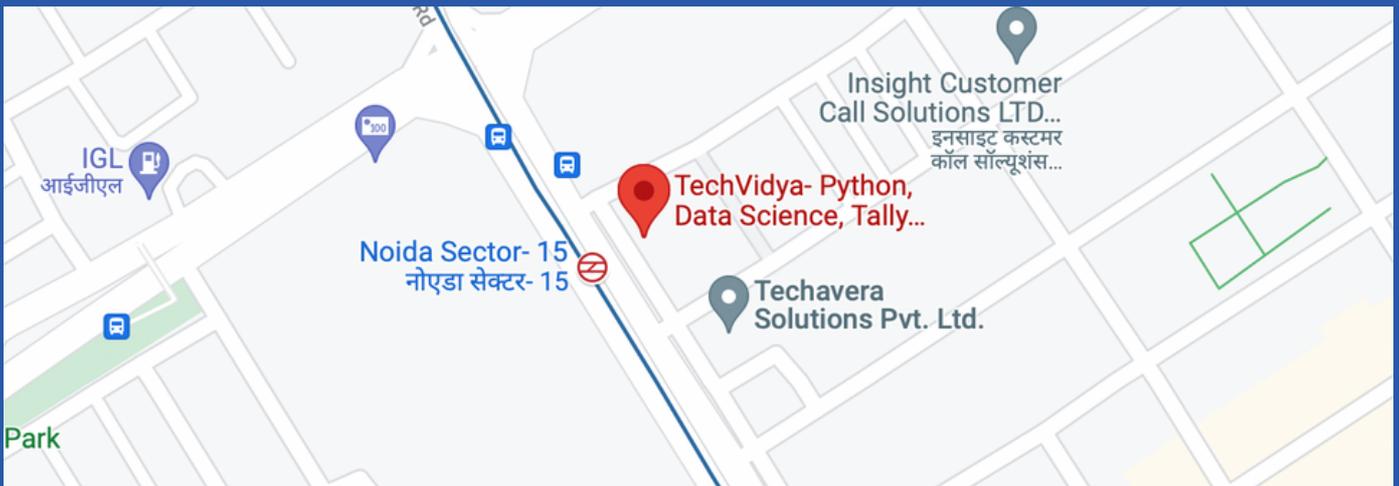
THE ECONOMIC TIMES

16-Jun

The journey of an EduTech Company



Contact Us



Address:

TechVidya Career Private Limited
A-78, Ground Floor
Sector-2, Noida, Uttar Pradesh
Landmark: Front of Metro Sec-15

Number & Mail ID:

+91 83759 66700
+91 98714 38701
Email: info@techvidya.education
www.techvidya.education



<https://www.facebook.com/techvidya15>



https://twitter.com/tech_vidya