



AZURE & DEVOPS TRAINING SYLLABUS



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HI-TECH INSTITUTION

Hi-tech Institution is a trusted IT training institution established in 2017, dedicated to transforming careers through industry-relevant, real-time project-based learning. With a strong presence in Pondicherry, Thiruchitrambalam, and Chennai, we specialize in creating future-ready professionals.



OUR VISION

Our vision is to bridge the gap between traditional learning and industry needs. Our mission is simple: to empower individuals with hands-on skills, globally recognized certifications, and the confidence to excel in the IT world.

CORPARATE TRUST US

We've successfully partnered with IBM and other forward-thinking organizations to deliver impactful team training. With over 400 batches completed, our track record is built on results, retention, and referrals.

EXPERT FACULTY

At Hi-Tech Institution, training is not handled by traditional lecturers — it's delivered by real-time industry experts. Our faculty are seasoned professionals with 10+ years of hands-on experience in Azure & DevOps and large-scale project delivery.

WHAT LEARNERS SAY

Our students not only succeed—they return. Many alumni re-enroll for additional courses and refer friends, a testament to our quality, trainer expertise, and hands-on approach.





01 INTERACTIVE LIVE TRAINING

100% live sessions with real-time Q&A and doubt-solving. Engaging, interactive, and never boring like recorded videos.

02 DAILY HANDS-ON LABS

Every topic comes with guided labs and tasks so you learn by doing, not just watching.

03 ONE-TO-ONE DOUBT SOLVING

Struggling with a concept? Get personal 1:1 mentoring to clear doubts quickly.

04 MENTOR SUPPORT BEYOND CLASS

Get lifetime trainer guidance and alumni group access for continuous support.

05 FLEXIBLE LEARNING

Morning, evening, and weekend batches to fit your schedule.



DOMAIN EXPERTISE

A Journey of Innovation and Success



CAREER GROWTH IN THIS DOMAIN

A career in Azure & DevOps offers high salaries and global opportunities — with DevOps Engineers earning ₹7–18 LPA and Cloud Engineers ₹10–22 LPA+, fueled by the growing demand for cloud adoption, automation, and scalable infrastructure across industries worldwide.

OUR SPECIALIZATION

Unlike generic IT courses, we focus on Azure & DevOps mastery. Our training dives deep into cloud infrastructure, CI/CD pipelines, containerization, Kubernetes, and deployment automation. Every session bridges theory with practice — so you don't just learn tools, you apply them to real-world projects and workflows just like leading tech companies do.

INDUSTRY-RELEVANT CURRICULUM

- Designed with corporate inputs
- Updated every quarter Covers
- end-to-end Azure & DevOps lifecycle

CERTIFICATION SUPPORT

We provide complete support to help you crack top certifications like AZ-900 (Azure Fundamentals), AZ-104 (Azure Administrator), and AZ-400 (Azure DevOps Engineer Expert) — with practice exams, expert guidance, and step-by-step mentorship for success.

INTERNSHIP

Learning without practice is incomplete. That's why we provide internships with real Azure & DevOps projects, covering CI/CD pipelines, cloud deployments, containerization, and automation. Every student builds real-world solutions and earns an internship certificate that adds strong value to resumes and interviews.

PORTFOLIO BUILDING

Learning without practice is incomplete. That's why we offer internships with real Azure & DevOps applications and hands-on cloud challenges. Students build practical solutions in CI/CD, automation, and deployment, earning certificates that boost resumes and interview success.

PRACTICAL-FIRST APPROACH

From Day 1, you'll learn by doing through labs, tasks, and real-world projects — gaining hands-on confidence to apply skills instantly.



Table of Contents

Microsoft Azure Services

◆ Introduction to Cloud

- What is Cloud Computing & Why it Matters
- Cloud Service Models (IaaS, PaaS, SaaS) with Examples
- Cloud Deployment Models: Public, Private, Hybrid
- Benefits of Cloud: Scalability, Reliability, Pay-as-you-go
- Hands-on: Create a free Azure Account

◆ Introduction to Azure

- Microsoft Azure Overview & Market Position
- Azure Global Infrastructure: Regions, Zones, Data Centers
- Resource Groups & Subscriptions
- Azure Portal, CLI, and PowerShell Overview
- Hands-on: Explore Azure Portal & Create First Resource

◆ Azure Identity & Access Management (IAM)

- Introduction to Azure Active Directory (AAD)
- Users, Groups, Roles & Role-Based Access Control (RBAC)
- Conditional Access & MFA (Multi-Factor Authentication)
- Enterprise Applications & Service Principals
- Hands-on: Create Users, Assign Roles, Apply RBAC

◆ Azure Virtual Machines

- Virtual Network (VNet) & Subnets
- Peering, DNS Resolution, Network Security Groups (NSG)
- VPN Gateway & ExpressRoute Overview
- Service Endpoints & Private Links
- Hands-on: Connect Two VMs in a VNet

◆ Azure Storage Accounts

- Types of Storage: Blob, File, Queue, Table
- Replication Models: LRS, GRS, RA-GRS
- Storage Security & Shared Access Signatures (SAS)
- Data Migration Options
- Hands-on: Create a Storage Account & Upload Data

◆ Azure Load Balancers

- Concept of Load Balancing
- Azure Load Balancer (Layer-4) vs Application Gateway (Layer-7)
- Health Probes & Rules
- Traffic Manager Overview
- Hands-on: Configure Load Balancer for VM Traffic

◆ Azure VM Scale Sets

- Introduction to Auto-scaling
- Scaling In/Out Policies
- Integration with Load Balancers
- High Availability Architecture
- Hands-on: Deploy VM Scale Set & Auto-scale Policy

◆ Azure Monitoring

- Azure Monitor Overview
- Metrics & Log Analytics
- Application Insights
- Alerts & Dashboards
- Hands-on: Monitor VM Performance with Azure Monitor

◆ Azure DNS

- Introduction to DNS in Azure
- Custom Domain Registration
- Record Types: A, CNAME, MX, TXT
- Integration with Web Applications
- Hands-on: Configure Custom Domain for Web App

◆ Azure Databases

- SQL Database as a Service
- Azure Cosmos DB Overview
- MySQL, PostgreSQL in Azure
- Database Backup & Restore Options
- Hands-on: Create SQL Database & Query Data

◆ Azure App Services

- Web Apps, API Apps, and Mobile Apps
- App Service Plans & Scaling Options
- Deployment Options: GitHub, FTP, Azure DevOps
- Application Security & Authentication
- Hands-on: Deploy a Website using Azure App Service

◆ Azure Active Directory

- Identity as a Service (IDaaS)
- Federation & Single Sign-On (SSO)
- Azure AD Connect & Hybrid Identity
- B2B & B2C Identity Management
- Hands-on: Configure SSO with Azure AD

◆ Azure Backup & Recovery

- Azure Backup Service Overview
- Recovery Services Vault
- Site Recovery for Disaster Recovery (DR)
- Backup Policies & Retention
- Hands-on: Configure VM Backup & Perform Recovery

DevOps Tools

◆ Azure DevOps Introduction

- What is DevOps & Why Azure DevOps?
- Key Services: Boards, Repos, Pipelines, Test Plans, Artifacts
- Agile Project Management with Boards
- CI/CD Workflow Overview
- Hands-on: Create an Azure DevOps Project & Manage Repo

◆ Python Basics

- Python for Automation & DevOps
- Variables, Data Types, Loops, Functions
- Working with JSON & YAML for automation
- Script execution in Azure pipelines
- Hands-on: Write Python scripts to automate resource creation

◆ Linux Basics

- Linux Commands for DevOps Engineers
- File Management, Permissions, Processes
- Networking & Package Management
- Shell Scripting for Automation
- Hands-on: Configure and manage a Linux VM in Azure

◆ Azure PowerShell

- Introduction to Azure PowerShell
- Installing & Configuring Modules
- Managing Resources: VMs, Networks, Storage
- Automating with Scripts
- Hands-on: Write PowerShell script to create Azure VM

Azure ARM Templates

- Infrastructure as Code (IaC) with ARM Templates
- Template Structure: Parameters, Variables, Outputs
- Deployment & Validation
- Reusable Templates for Enterprise
- Hands-on: Deploy Web App using ARM Template

Azure Terraform

- What is Terraform & Why use it in Azure?
- Providers, State Management, Modules
- Writing & Applying Terraform Configurations
- Integrating with CI/CD Pipelines
- Hands-on: Deploy Infrastructure with Terraform

Azure Kubernetes (AKS)

- Introduction to Kubernetes & Containers
- AKS Cluster Setup & Configuration
- Pods, Deployments, Services, Ingress
- Scaling & Monitoring Applications in AKS
- Hands-on: Deploy Containerized App to AKS Cluster

Azure Jenkins

- Jenkins Overview for CI/CD
- Installation & Configuration in Azure
- Pipelines & Plugins for Automation
- Integration with GitHub & Azure Repos
- Hands-on: Build CI/CD pipeline with Jenkins on Azure

Azure Functions

- Introduction to Serverless Computing
- Triggers & Bindings in Azure Functions
- Event-Driven Architecture
- Integration with Storage, Event Hub, & Logic Apps
- Hands-on: Build & Deploy Azure Function for Automation



Azure Ansible

- Configuration Management with Ansible
- Ansible Playbooks & Modules for Azure
- Automating VM & Networking Configurations
- Integration with Jenkins & Terraform
- Hands-on: Automate Resource Provisioning with Ansible



Azure CLI

- Introduction to Azure CLI
- Authentication & Resource Management
- Writing Shell Scripts with CLI Commands
- Azure CLI vs PowerShell – When to use what?
- Hands-on: Deploy & Manage Azure Web App with CLI



Azure Docker

- Introduction to Docker & Containers
- Building & Running Images
- Docker Hub & Azure Container Registry (ACR)
- Deploying Docker Containers in Azure
- Hands-on: Containerize App & Push to ACR



Special Real-Time Use Cases

- CI/CD for a Multi-Tier Application on Azure
 - Infrastructure Provisioning with Terraform & Ansible
 - Containerized App Deployment on AKS with Jenkins Pipeline
 - End-to-End Monitoring & Scaling in Azure
 - Hands-on Project: Full DevOps Workflow Implementation
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WHAT OUR STUDENTS SAY

We believe results speak louder than promises — and our students' reviews are proof of the trust and transformation we deliver every batch.

 **Kirubagaran .D**
5 reviews
★★★★★ 8 months ago

I joined this institute to take training for AWS & Devops. My all over experience is very good 🤩. The knowledge given by the sir is very helpful to me 🙏. Thank you.

 **Harish Kumar**
4 reviews
★★★★★ 8 months ago

While I joining this institute, I have less knowledge in aws and devops , after the guidance and good teaching by the Mathesh sir I have gained more knowledge. Thank you for your guidance and Teaching.

 **harshavardhana**
2 reviews
★★★★★ 11 months ago

I recently completed an AWS and DevOps course at Hi-Tech institution, and I couldn't be more satisfied with the experience. The course was incredibly well-structured, covering both fundamental and advanced concepts in a way that was easy to follow yet challenging enough to push my learning boundaries.

 **Sridhar sri**
1 review
★★★★★ 5 months ago

"Well-organized AWS and DevOps training with experienced mentors. A great place to build practical skills!"



 **Bhuvanesh.V**
2 reviews
★★★★★ 5 months ago

Good learning environment! The AWS and DevOps sessions were clear, practical, and highly beneficial for beginners



 **AKASH**
2 reviews
★★★★★ 5 months ago

Excellent training on AWS and DevOps! The mentors were knowledgeable, and the sessions were very insightful. Highly recommended!



 **Sanjeevi Kumar**
1 review
★★★★★ 3 months ago

I recently completed the AWS DevOps course at HiTech and I'm extremely satisfied with the experience. The trainers were knowledgeable and provided excellent support throughout the course. The hands-on labs and real-world examples helped me gain practical skills and confidence in using AWS services.

 **Kamal Raj**
1 review · 1 photo
★★★★★ 11 months ago

Beyond the classroom, the Hi-Tech Institution center offers excellent support for AWS & Devops The availability of additional resources, such extra practice sessions, is incredibly beneficial. The staff is always approachable and ready to assist with any queries or challenges.

 **Anuj Jena**
3 reviews
★★★★★ 7 months ago

I have attend AWS batch (Batch Number - B184 & Timing - 7:00 AM - 9:00 AM (Weekend)) & it was my good luck to had Hari as my batch instructor. Hari has tremendous knowledge on AWS & DevOps. I learnt lot of new topics related to AWS & DevOps. I want to highlight some point here according to my experience.

 **Sathyaswarubini Kannan**
4 reviews
★★★★★ 7 months ago

I am Sathyaswarubini from Batch -B184, honestly speaking that Hari is a perfect instructor for AWS DevOps session. I am completely impressed with his Youtube videos and coaching. Every session started on time with clear note of him. I spent a great period of time on his sessions and got some confident level to attend the interviews in future. Thank you hari.

 **Naveen Kumar**
1 review
★★★★★ 5 months ago

Had a great experience learning AWS and DevOps at Hi-Tech Institution. The structured training and expert guidance made it worthwhile



 **D.Chandru**
1 review
★★★★★ 2 weeks ago **NEW**

I had the opportunity to learn AWS Cloud Computing at HTGE Technologies Pvt Ltd for one month, and it was an excellent experience. The training was well-structured, covering both fundamental concepts and practical applications of AWS services. The instructors were knowledgeable, supportive, and always ready to clarify doubts with real-world examples. which helped me gain confidence in working with cloud tools. The learning environment was friendly, interactive, and career-focused.

 **vindhiya e**
1 review
★★★★★ 4 days ago **NEW**

I recently completed a one-month Cloud Computing internship at HTGE Technologies Pvt Ltd. It was a great learning experience where I got to work with real cloud platforms like AWS . The team was supportive, and the work environment made it easy to grow and ask questions. I learned a lot in a short time and truly appreciated the hands-on exposure. Highly recommend HTGE for anyone looking to build practical skills in tech.

Check out what our students are saying about us on Google :

<https://share.google/hm4sQdfCGAIA3CYHN>



Your Future in Azure & DevOps Starts Here

You've explored the course, the curriculum, the career scope, and the success stories. Now comes the most important step — taking action to build your career.

At HTGE Technologies, we are not just another training institute. We are a career-launchpad trusted by 200+ batches and corporate clients like IBM. Our mission is simple: to bridge the gap between learning and real-world application.

MEDIA MENTIONS

Youtube : <https://www.youtube.com/@hitechinstitution>

LinkedIn : <https://www.youtube.com/@hitechinstitution>

Instagram : <https://www.instagram.com/hitech.institution>

Website : www.hitechinstitution.com

COURSE DETAILS

Duration: 3 Months + Internship

Mode : In-Person & On-Line

Language : Tamil & English

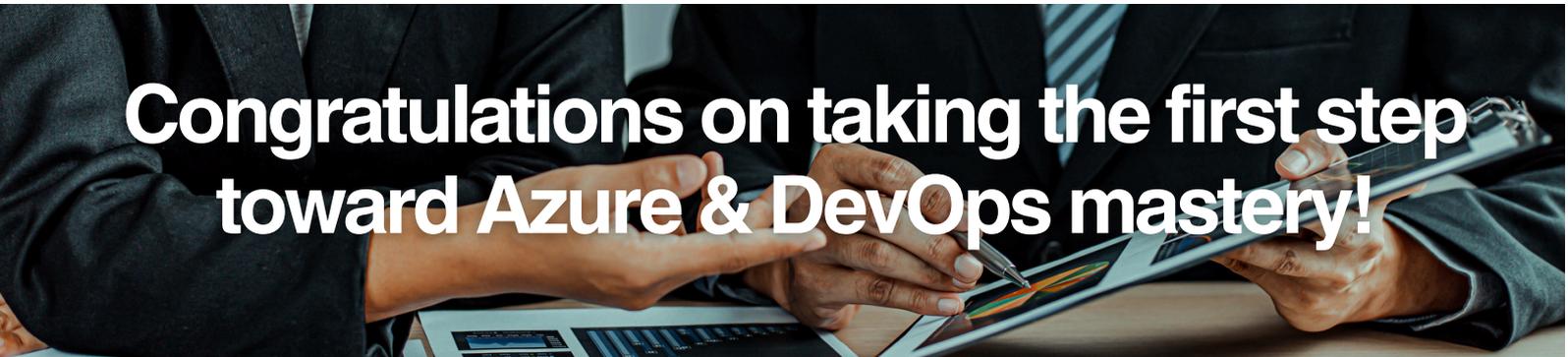
Mode of Training: Live Online Sessions (with recordings)

Eligibility: Freshers, Working Professionals, Final-Year Students, Career Switchers

READY TO TAKE THE NEXT STEP

Visit: hitechinstitution.com

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Congratulations on taking the first step toward Azure & DevOps mastery!