AWS Certified Solution Architect Associate

- Course Name: AWS Certified Solution Architect Associate
- Course Code: IT4 P1
- Instructor: Mr. Sunil (8 Yrs of Exp; AWS Authorized Instructor; AWS Certified Solution Architect and SysOps Administrator Associate)
- For Whom: S/W Engineers (Fresher & Experienced) & College Goers
- **Frequency:** 2 Sessions per week. 1 Session = 2 Hours.
- Fees: 199 US\$ (Get Discount for Referrals and Group Joining)
- **Duration:** 24-26 Hours Approx. (6 Weeks Approx.)
- Note: First Session is completely FREE and open to all. Make Full Payment only after 1st FREE session and if interested to continue.
- Reach us for more details.
- Note: Reach us for Advanced Python Programming, Python for Data Science, Vedic Speed Mathematics (FREE) and all other IT Courses.
- More Info: <u>www.Speed16.com/training</u>
- Contact: info@speed16.com OR +91-97640-58-654 OR Direct Whatsapp (https://wa.me/919764058654/?text=Hi) OR Direct Telegram (https://t.me/CP512)

Course Features:

- ♣ Real world skills with Demo.
- Personal Training.
- **♣** Complete Hands on Session.
- **QA Session.**
- ♣ Access to PDF Version of PPT.
- Access to Code & Scripts.

Scroll Down for Complete Syllabus.





Syllabus in Brief:

Module #	Module Name
0	AWS Infrastructure.
1	Identity & Access Management.
2	Simple Storage Service
3	Elastic Compute Cloud.
4	Elastic Load Balancer & Autoscaling
5	Relational Database Service.
6	DynamoDB
7	Virtual Private Cloud.
8	CloudWatch. CloudTrail & Config
9	CloudFront, Route53 & Global accelerator.
10	CloudFormation, System Manager, OpsWorks, ElasticBeanstalk.
11	SQS & SNS.
12	Elastic Container Service
13	AWS Lambda, API Gateway & Step Functions.
14	Disaster Recovery
15	Well Architected Framework.

Syllabus in Detail:

♣ Module 0 – AWS Infrastructure.

- 1. Cloud Computing
- 2. Benefits for choosing cloud
- 3. Cloud providers
- 4. Service Models
- 5. Deployment models.
- 6. AWS Account
- 7. AWS Data Centers
- 8. AWS Availability Zones
- 9. AWS Regions
- 10. AWS Edge Locations.
- 11. AWS Regional cache.
- 12. Region Selection

♣ Module 1 – Identity & Access Management.

- 1. Need for Identity Access Management in AWS.
- 2. What is Identity Access Management?

Speed16 Academy; Online IT Training Academy (Speed16.com/training)

- 3. Use Cases.
- 4. Multi Factor Authentication
- 5. Users.
- 6. Groups.
- 7. Roles.
- 8. Policies.
- 9. Identity Provider & Federation.
- 10. Access Analyzer.
- 11. Best Practices.

♣ Module 2 – Simple Storage Service

- 1. Need for Simple Storage Service
- 2. What is Simple Storage Service
- 3. Properties of Simple Storage Service
- 4. Permissions
- 5. Encryptions
- 6. Access Points
- 7. Storage Class
- 8. Life Cycle Rule
- 9. Object Replication
- 10. Use Cases.
- 11. Large Data Movement.
- 12. S3 Glacier

♣ Module 3 – Elastic Compute Cloud.

- 1. Need for Elastic Compute Cloud (EC2).
- 2. Amazon Machine Image.
- 3. Instance Types.
- 4. Purchasing Option.
- 5. User Data & Meta Data
- 6. Storage to EC2 & Tagging.
- 7. Security Group & Key Pair.
- 8. Placement Group.
- 9. EC2 Image Builder.
- 10. Shared File System.
- 11. AWS Computer Optimizer.

♣ Module 4 – Elastic Load Balancer & Autoscaling

- 1. Need for Elastic Load Balancer.
- 2. What is Elastic Load Balancer.
- 3. Types of Elastic Load Balancer.

Speed16 Academy; Online IT Training Academy (Speed16.com/training)

- 4. Target Group.
- 5. Features of Elastic Load Balancer
- 6. Need of Autoscaling group.
- 7. What is Autoscaling group.
- 8. Purchasing Option
- 9. Launch configuration & Launch Template.
- 10. Scaling Policies.

♣ Module 5 – Relational Database Service.

- 1. Types of Database.
- 2. Need for RDS.
- 3. What is RDS.
- 4. RDS Engine Types.
- 5. Features of RDS.
- 6. Amazon Aurora.
- 7. Read Replica for RDS & Amazon Aurora.
- 8. Security of RDS.
- 9. Database Migration Service.
- 10. RedShift.
- 11. Use cases.

Module 6 – DynamoDB

- 1. Need for DynamoDB
- 2. What is DynamoDB.
- 3. Features of DynamoDB.
- 4. Components of DynamoDB.
- 5. DynamoDB Global Table.
- 6. DynamoDB Transactions
- 7. DynamoDB Accelerator (DAX)
- 8. ElastiCache

♣ Module 7 – Virtual Private Cloud.

- 1. Need for VPC.
- 2. What is VPC.
- 3. CIDR Range.
- 4. Subnets.
- 5. Route table
- 6. Internet Gateway
- 7. NAT gateway & NAT instance
- 8. Bastion Host
- 9. Network Access control list

- 10. VPN Gateway
- 11. Direct Connect
- 12. VPC Peering
- 13. Transit Gateway

Module 8 - CloudWatch. CloudTrail & Config

- 1. Need for CloudWatch
- 2. What is CloudWatch
- 3. CloudWatch Metric
- 4. CloudWatch Dashboard
- 5. CloudWatch Alarm
- 6. CloudWatch Logs
- 7. CloudWatch Events
- 8. AWS CloudTrail
- 9. AWS Config
- 10. Use Cases

♣ Module 9 – CloudFront, Route53 & Global accelerator.

- 1. What is CloudFront?
- 2. How CloudFront works?
- 3. Expiring content in edge location
- 4. Lambada@Edge
- 5. Use cases of CloudFront
- 6. What is Route53
- 7. Routing Policies
- 8. Global accelerator

♣ Module 10 – CloudFormation, System Manager, OpsWorks, ElasticBeanstalk.

- 1. Need for CloudFormation
- 2. What is CloudFormation.
- 3. CloudFormation Template
- 4. Benefits of CloudFormation
- 5. Updating Stack
- 6. Layered CloudFormation Template
- 7. AWS QuickStart
- 8. What is AWS System Manager?
- 9. Tasks done by System Manager
- 10. What is OpsWorks
- 11. What is Elastic Beanstalk?
- 12. Application version, environments

♣ Module 11 – SQS & SNS.

- 1. Why SQS?
- 2. What is SQS?
- 3. Benefits of SQS
- 4. Types of SQS
- 5. Features & Limits
- 6. SQS Message Life cycle.
- 7. What is SNS?
- 8. Subscriber Types.
- 9. Features of SNS.
- 10. Comparison Between SQS & SNS.
- 11. Use cases of SQS & SNS

♣ Module 12 – Elastic Container Service

- 1. What is Docker
- 2. What is Elastic Container service
- 3. ECS EC2 Launch type
- 4. ECS Farget Launch type
- 5. What is Elastic Container Registry.
- 6. What is EKS

♣ Module 13 – AWS Lambda, API Gateway & Step Functions.

- 1. Need for AWS Lambada
- 2. What is AWS Lambada
- 3. Lambada Event sources
- 4. Lambada Configurations
- 5. What is API Gateway
- 6. Benefits of API Gateway.
- 7. Need for Step Function
- 8. What is Step Function
- 9. What is state machine
- 10. Examples of Step Function

♣ Module 14 – Disaster Recovery

- 1. Need for Disaster Recovery.
- 2. What is Disaster Recovery & DR Strategy.
- 3. RTO & RPO.
- 4. Back up & Restore.
- 5. Pilot Light.
- 6. Warm Standby
- 7. Multi-Site Active-Active.

♣ Module 15 – Well Architected Framework.

- 1. What is Well Architected Framework.
- 2. Operational Excellence
- 3. Security
- 4. Reliability
- 5. Performance Efficiency
- 6. Cost Optimization

Contact:

Chaitanya Patil

Mobile: +91-97640-58-654

Direct WhatsApp: https://wa.me/919764058654/?text=Hi

Direct Telegram (https://t.me/CP512)

Email: info@speed16.com

Website: www.Speed16.com/training

Vedic Speed Mathematics (Paperback, eBook, Video Course, FREE Work Book and FREE Online Training) Link: www.Speed16.com/books/vm

- **4 Vedic Speed Mathematics:** Learn Ancient India's Amazingly Compact, Powerful and World's Fastest Mental Calculation System @just ₹: 99 (1.3 US\$).
- → Paperback, eBook, Video Course, Free Workbook & Online Interactive Training on Vedic Speed Mathematics, C & Python Programming.
- www.Speed16.com/books/vm
- ♣ Online Python Programming (Separate Batches for Software Professionals and US/Europe High School Students) www.Speed16.com/training
- IT Training: www.Speed16.com/training
- ♣ Contact: Chaitanya Patil info@speed16.com +91-97640-58-654 Direct Whatsapp