

# **20 Days TOC – Architect API & Integration Services (Azure)**

## **Day 1 – API Management Fundamentals & Gateway** (Module 1)

- Introduction to API Management
- Create an API Gateway
- Import and publish an API
- Call API with subscription key

## **Day 2 – API Performance & Caching** (Module 2)

- API Management policies
- Choosing caching policy
- Configure response caching
- Performance improvement under load

## **Day 3 – API Security & Protection** (Module 3)

- Remove technical headers
- Mask URLs using transformation policies
- Throttling and rate limiting
- Protect backend APIs

## **Day 4 – Authentication & Access Control in APIM** (Module 4)

- API keys and subscriptions
- Client certificate authentication
- Secure API access

## **Day 5 – Azure Functions with API Management** (Module 5)

- Exposing Function Apps as APIs
- Import Azure Function apps into APIM
- Unified API surface

## **Day 6 – Logic Apps & Integration Account** (Module 6)

- Logic Apps overview
- Logic Apps workflow model
- Logic Apps V2
- Triggers, actions and conditions
- Integration with Blob & SQL
- Developing Logic Apps in VS Code

## **Day 7 – Azure Service Bus (Queues & Topics)** (Module 7)

- Service Bus concepts
- Queue implementation
- Topics and subscriptions
- Connection strings

- Service Bus vs Storage queues
- Use cases and best practices

## **Day 8 – Event Grid – Subscriptions & Domains** [\(Module 8\)](#)

- Event Grid introduction
- Register Event Grid subscription
- Logging and monitoring in Functions
- Use cases and case studies

## **Day 9 – API Management Advanced Services** [\(Module 9\)](#)

- Need and benefits of APIs
- OpenID Connect & OAuth2
- Create managed APIs
- Apply policies
- Logging and monitoring

## **Day 10 – Developer Portal & API Discovery** [\(Module 10\)](#)

- Azure Developer Portal architecture
- Publishing and discovering APIs

## **Day 11 – API Gateway Architecture** [\(Module 11\)](#)

- API Gateway concepts
- Authentication and SSL termination
- Routing
- Load balancing
- Monitoring and billing

## **Day 12 – Event Grid Topics & Events** [\(Module 12\)](#)

- Built-in and custom events
- Register Event Grid topics
- Logging and monitoring

## **Day 13 – Azure Data Factory** [\(Module 13\)](#)

- Data Factory concepts
- Pipelines, activities, datasets
- Linked services
- Triggers and Data Flows
- User properties and monitoring

## **Day 14 – Azure Key Vault** [\(Module 14\)](#)

- Azure Key Vault overview
- Permissions and RBAC
- Accessing secrets through APIs

## **Day 15 –Azure Monitor/Log Analytics (Merged)** (Module 15 + Module 16)

- Azure Monitor architecture
- Alerts and diagnostics
- Log Analytics concepts
- Log Analytics workspace
- Scoping monitored resources

## **Day 16 – Azure Function Apps** (Module 17)

- Azure Functions overview
- Triggers and bindings
- Supported languages
- Function pipeline
- Building serverless pipelines

## **Day 17 – Azure DevOps** (Module 18)

- Azure DevOps architecture
- Boards, Repos, Pipelines, Artifacts
- Test Plans
- YAML pipeline basics
- Git vs TFVC
- Project management using DevOps

## **Day 18 – Azure Active Directory & Managed Identity** (Module 19)

- Azure AD fundamentals
- Identity management
- Securing applications
- SSO concepts
- OpenID vs OAuth
- Authentication flow
- RBAC

## **Day 19 –App Registrations & Resource Groups (Merged)** (Module 20 + Module 21)

### **App Registrations**

- App registration configuration
- Auth & authorization workflows
- Integrating App Services with AAD

### **Resource Groups**

- Resources and Resource Groups
- ARM concepts
- Policies
- Cost and management best practices

## Day 20 – Azure Storage & Data Lake [\(Module 22\)](#)

- Azure Storage overview
- Blob, Table, File and Queue storage
- Block, page and append blobs
- Lifecycle management
- GPv1 vs GPv2
- Azure Data Lake security
- Organizing data using Blob storage
- Creating and accessing storage resources