



AMAZON WEB SERVICES (AWS) SYLLABUS COPY

Engineered for skill enhancement.



PROGRAM HIGHLIGHTS

Accredited Certificates :

- ✓ Program approved ISO Certification

Internships :

- ✓ Industry-relevant opportunities provided-

Placement Assistance :

- ✓ Career guidance from industry experts-

Basic to Advanced Level Training :

- ✓ Learn from experienced AI professionals .

Live & Recorded Lectures :

- ✓ Flexible learning at your convenience .

Real-Time Projects :

- ✓ Hands-on minor & major projects



ABOUT US

- **OUR MISSION :**

Nxt Sync is a pioneering EdTech company committed to bridging the gap between theoretical learning and practical application. Our mission is to empower students with cutting-edge AI skills that enhance employability and prepare them for a tech-driven future.

- **OUR VISION--UPSKILL:** Empowering minds for the future.
- **INNOVATE:** Fostering creativity and breakthroughs .
- **EXCEL:** Preparing industry-ready professionals.



WHY AMAZON WEB SERVICES (AWS)?

- Cost-Effective & Scalable Solution
- High Demand for Cloud Professionals
- Secure & Reliable Cloud Infrastructure
- Competitive Salaries & Career Growth
- Versatile Cloud Service Offerings
- Integration with DevOps & AI/ML Industry-Leading Cloud Service Provider



LEARNING PATH

- Introduction to Cloud Computing & AWS
- AWS Core Services (Compute, Storage, Networking)
- AWS Security & Compliance
- AWS Databases & Data Management
- AWS DevOps & Automation
- AWS Machine Learning & AI Services
- AWS Serverless Computing
- AWS Cost Optimization & Best Practices
- AWS Deployment & CI/CD Pipelines
- Capstone Projects & Industry Case Studies



DETAILED MODULE BREAKDOWN

Module 1: Introduction to Cloud Computing & AWS

- Basics of Cloud Computing
- AWS Global Infrastructure & Services
- Benefits of AWS Cloud
- AWS Free Tier & Account Setup

Module 2: AWS Core Services (Compute, Storage, Networking)

- EC2, Auto Scaling, Elastic Load Balancer (ELB)
- S3, EBS, EFS – Storage Solution
- VPC, Route 53, CloudFront – Networking Essentials



Module 3: AWS Security & Compliance

- AWS Identity & Access Management (IAM)
- AWS Security Groups & NACLs
- AWS Compliance & Shared Responsibility Model

Module 4: AWS Databases & Data Management

- Amazon RDS, DynamoDB, Redshift
- AWS Database Migration Service (DMS)
- Data Warehousing & Big Data Solutions

Module 5: AWS DevOps & Automation

- AWS Code Pipeline, Code Deploy, Code Build
- Infrastructure as Code (Terraform, CloudFormation)
- AWS CLI & SDKs



Module 6: AWS Machine Learning & AI Services

- AWS Sage Maker for ML Model Training
- AWS Lex, Polly, and Recognition
- AI-Powered Chatbots & Analytics

Module 7: AWS Serverless Computing

- AWS Lambda – Serverless Functions
- API Gateway – Building Scalable APIs
- AWS Step Functions & Event Bridge

Module 8: AWS Cost Optimization & Best Practices

- AWS Pricing Models & Cost Management
- AWS Well-Architected Framework
- Cost-Effective Cloud Architecture Design



Module 9: AWS Deployment & CI/CD Pipelines

- AWS Elastic Beanstalk & ECS/EKS
- CI/CD Pipelines with AWS DevOps Tools
- Monitoring & Logging with CloudWatch & X-Ray

Module 10: Capstone Projects & Industry Case Studies

- Hands-on AWS Cloud Deployment Projects
- Real-world Case Studies (E-commerce, Healthcare, Finance)
- Industry Collaboration & Research-Based Projects



ASSIGNMENT'S & ASSESSMENTS

- **Weekly hands-on assignments**
- **Mid-term AI mini-projects**
- **Final capstone AI project**
- **Live presentations & discussions**



TOOLS & FRAMEWORKS USED

AWS Core Services

- EC2, S3, Lambda, RDS, DynamoDB

Security & Compliance

- IAM, KMS, AWS Shield, AWS WAF

DevOps & Automation

- AWS Code Pipeline, Terraform, CloudFormation

Machine Learning & AI

- AWS Sage Maker, Recognition, Polly, Lex

Monitoring & Logging

- AWS CloudWatch, AWS X-Ray, AWS Config



RECOMMENDED READING

AWS & Cloud Computing:

- "AWS Certified Solutions Architect Official Study Guide" - Ben Piper
- "Amazon Web Services in Action" - Andreas Wittig & Michael Wittig
- "The DevOps Handbook" - Gene Kim



WHY CHOOSE NXTSYNC?

- Industry-Aligned AWS Curriculum
- Hands-on Real-World Projects
- Expert Mentorship & Career Guidance
- Flexible Learning Schedule
- ISO-Certified AWS Training Program

Start Your AWS Journey with NxtSync Today!!!!



THANK YOU

