AWS CERTIFIED SOLUTION ARCHITECT PROGRAM

Ramaq Chools
Consulting &Training

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INTRODUCTION TO AWS SOLUTION ARCHITECTURE

Hello, future AWS Solution Architect! The AWS Certified Solution Architect program prepares you for the role of an AWS solution architect, a professional who designs, implements, and manages cloud solutions using Amazon Web Services (AWS). You will learn the skills and best practices for AWS solution architecture, such as selecting the appropriate AWS services, applying the AWS Well-Architected Framework, and optimizing the performance, security, and cost of your solutions. By earning a globally recognized certification from AWS, you will demonstrate your technical proficiency and credibility, advancing your career and increasing your earning potential in the growing field of cloud computing.

Why Choose Chools?

Numbers That Speak for Themselves:

- 10,000+ Successful Alumni: Join a network of impactful professionals.
- 95% Job Placement Rate: Secure your future with Chools' proven track record.
- 20+ Years of Excellence: Trust in a legacy of education and industry expertise.
- 200+ Industry Partnerships: Leverage our connections for real-world insights and opportunities.

What Sets Us Apart?

- **Expert Instructors**: Learn from industry veterans with hands-on experience.
- **Hybrid Learning Model**: Balance online flexibility with in-person engagement.
- **Comprehensive Curriculum**: Stay ahead with courses designed to meet market demands.
- **Community and Networking**: Be part of an active community of learners and professionals.

Who Can Apply?

Eligibility Criteria:

- A bachelor's degree in any subject, preferably with a STEM background.
- Good command of English.
- A minimum of 1 or 2 years of working experience in designing and deploying applications on the AWS platform

- Expertise in at least one high-level programming language.
- Ability to identify the requirements of an application, define best practices for securing the AWS application, and deploy hybrid systems with AWS components.

Program Overview

The AWS Certified Solution Architect Program at Chools provides an extensive education in AWS solution architecture. Our curriculum covers a wide range of topics to ensure a thorough understanding, combining theoretical knowledge with practical, hands-on experience.

Learning Mode:

- **Hybrid Learning Model:** Combines online learning with in-person sessions for flexibility and interactive engagement.
- **Interactive Sessions:** Includes live webinars, workshops, and Q&A forums with expert instructors and peers.
- **Self-paced Learning:** Access course materials anytime, allowing you to learn at your own pace.

Skills Learned

- **AI Algorithms**: Understanding and implementing advanced AI algorithms.
- **Machine Learning**: Supervised and unsupervised learning methods.
- **Natural Language Processing (NLP)**: Techniques for text analysis.
- **Computer Vision**: Techniques for image processing and analysis.
- **Data Wrangling**: Cleaning and preparing data for AI models.
- **Data Visualization**: Creating impactful visualizations.
- **Programming Skills**: Proficiency in Python and relevant libraries.
- **AI Ethics**: Understanding responsible AI use.
- **Big Data Technologies**: Handling large datasets with Hadoop and Spark.
- **Cloud Computing**: Utilizing cloud platforms for AI tasks.

Job Positions and Opportunities

- **Career Paths**: AI Engineer, Machine Learning Engineer, Data Scientist, AI Researcher, AI Consultant, Computer Vision Engineer, NLP Engineer.
- **Industry Demand**: High demand across various sectors, competitive salaries, and strong growth potential.

Key Industry Verticals

- **Skill Application Areas**: Finance, Healthcare, Technology, Marketing, Manufacturing, Energy, Education, Telecommunications, Logistics and Supply Chain, Government and Public Services.

Curriculum Highlights

- **Fundamental Knowledge:** Core principles of AWS.
- **Advanced Techniques:** In-depth understanding of AWS solution architecture and best practices.
- **Real-World Applications:** Practical projects and case studies.
- **Capstone Project:** Integrating all your skills and knowledge.

Professional Development

- **Continuous Learning:** Stay updated with the latest trends in AWS.
- **Networking Opportunities:** Connect with industry experts, peers, and alumni.
- **Ethical Considerations:** Learn best practices and industry standards.

By completing the **AWS Certified Solution Architect Program** at Chools, you'll gain the skills, knowledge, and certification needed to excel in AWS solution architecture, positioning yourself as a valuable asset to any organization.

Program Objectives

- Master technical skills in AWS solution architecture.
- Implement best practices for designing, implementing, and managing AWS solutions.
- Explore AWS services and the AWS Well-Architected Framework.
- Address real-world cloud computing challenges.
- Understand best practices in AWS solution architecture.
- Foster continuous learning.
- Encourage teamwork and collaboration.
- Prepare for advanced roles in AWS solution architecture.

Expected Outcomes

- Proficiency in AWS tools and techniques.
- Practical experience through hands-on projects.
- Strong analytical and problem-solving skills.
- Application of best practices in AWS solution architecture.
- Innovation in cloud computing solutions

PROGRAM OUTLINE

Stage 1: Fundamentals of AWS

1. Introduction to AWS
o Core principles, services, and tools.

2. AWS Service Models
o Understanding IaaS, PaaS, SaaS on AWS.

Stage 2: Advanced AWS Solution Architecture

3. Designing AWS Solutions
o Best practices for designing AWS solutions.

4. AWS Security and Compliance
o Ensuring security and compliance in AWS solutions.

5. Optimizing AWS Performance
o Techniques for optimizing performance and cost-efficiency.

6. AWS Deployment and Management
o Managing AWS deployments using various tools.

Stage 3: Practical Applications

7. Hands-on AWS Projects
o Real-world projects to apply AWS solution architecture skills.

8. AWS Integration
o Integrating AWS solutions with existing systems.

Stage 4: Capstone Project

9. Integration of Learned Skills
o Apply tools and techniques to real-world AWS projects.

10. Advanced AWS Techniques
o Deepening knowledge and exploring advanced AWS capabilities.

Elective Modules

11. Data Ethics and Privacy
o Ethical considerations, privacy laws, compliance strategies.

12. AI for AWS
o Implementing AI solutions in AWS architectures.

13. Big Data in AWS
o Managing big data applications in AWS environments.

14. AWS DevOps
o CI/CD pipelines, automation, and containerization with Docker, Kubernetes.

15. AWS Project Management
o Leading AWS projects, ensuring successful delivery.

16. AWS for IoT
o Integrating AWS solutions with IoT devices.

Enrollment Now Open!

Take the first step towards becoming a certified AWS Solution Architect. Enroll in our **AWS Certified Solution Architect Program** and enhance your career with Chools.