

Emerging Technologies

Cloud Architect Certification Program

Curriculum

Program Outline:

Module 1: Fundamentals of Cloud Computing

- 1. Introduction to Cloud Computing
 - o Core principles, concepts, and platforms.
- 2. Cloud Service Models
 - o Understanding IaaS, PaaS, SaaS.

Module 2: Advanced Cloud Architecture

- 3. Designing Cloud Solutions
 - o Best practices for designing cloud solutions.
- 4. Cloud Security and Compliance
 - o Ensuring security and compliance in cloud solutions.
- 5. Optimizing Cloud Performance
 - o Techniques for optimizing performance and cost-efficiency.
- 6. Cloud Deployment and Management
 - o Managing cloud deployments using various platforms.

Module 3: Practical Applications

- 7. Hands-on Cloud Projects
 - o Real-world projects to apply cloud architecture skills.



8. Cloud Integration

o Integrating cloud solutions with existing systems.

Module 4: Capstone Project

9. Integration of Learned Skills

o Apply tools and techniques to real-world cloud architecture projects.

10. Advanced Cloud Techniques

o Deepening knowledge and exploring advanced cloud capabilities.

Elective Modules

11. Data Ethics and Privacy

o Ethical considerations, privacy laws, compliance strategies.

12. AI for Cloud Computing

o Implementing AI solutions in cloud architectures.

13. Big Data in the Cloud

o Managing big data applications in cloud environments.

14. Cloud DevOps

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

15. Cloud Project Management

o Leading cloud projects, ensuring successful delivery.

16. Cloud for IoT

o Integrating cloud solutions with IoT devices.

Websites:

- https://chools.in/
- https://ramaqchools.com/
- https://www.choolsgroup.com/