CERTIFIED KUBERNETES - AKS PROFESSIONAL PROGRAM

Simple | Smart | Speed

CHOOLS

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INTRODUCTION TO KUBERNETES & AKS

Hello, future Kubernetes and AKS professional! The Certified Kubernetes – AKS Professional program at Chools is a comprehensive training program that teaches you how to use Kubernetes and Azure Kubernetes Service (AKS) to design, deploy, and manage cloud-native applications. AKS is a managed Kubernetes service that simplifies the orchestration, scaling, and security of containerized workloads on Azure. You will learn the skills and best practices for Kubernetes and AKS, and demonstrate your technical proficiency and credibility to employers, clients, and peers by earning a certification from Microsoft or the Cloud Native Computing Foundation (CNCF). This certification will help you advance your career and increase your earning potential in the growing field of cloud computing and Devops.

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 meet market demands.
- **Community and Networking:** Be part of an active community of learners and professionals.

Who Can Apply?

Eligibility Criteria:

- **Kubernetes Educational Background:** A bachelor's degree in any subject, preferably with a STEM background.
- **Kubernetes Skills:** Good command of English.

- **Kubernetes Work Experience:** A minimum of 1 or 2 years of working experience in designing and deploying applications on the Kubernetes platform.
- **Technical Skills:** Expertise in at least one high-level programming language, ability to identify the requirements of an application, defining best practices for securing, governing, and administering Kubernetes.

Program Overview

The Certified Kubernetes - AKS Professional Program at Chools provides an extensive education in Kubernetes and AKS. Our curriculum covers a wide range of topics to ensure a thorough understanding, combining theoretical knowledge with practical, hands-on experience.

Learning Mode:

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

Skills Learned

- **Kubernetes Fundamentals:** Understanding core Kubernetes concepts and architecture.
- **AKS Management:** Deploying and managing applications with Azure Kubernetes Service (AKS).
- **Container Orchestration:** Orchestrating containerized workloads using Kubernetes.
- **Cloud Security:** Ensuring the security of Kubernetes and AKS solutions.
- **Performance Optimization:** Optimizing Kubernetes and AKS for performance and scalability.
- **Deployment:** Designing and managing Kubernetes deployments.
- **Devops Integration:** Implementing Devops practices with Kubernetes and AKS.

Job Positions and Opportunities

- **Career Paths:** Kubernetes Kubernetes Administrator, Cloud Engineer, Cloud Consultant, Devops Engineer, Kubernetes Security Specialist
- **Industry Demand:** High demand across various sectors, competitive salaries, and strong growth potential.

Key Industry Verticals

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

Curriculum Highlights:

- **Fundamental Knowledge:** Core principles of Kubernetes and AKS.
- **Advanced Techniques:** In-depth understanding of Kubernetes and AKS best practices.
- **Real-World Applications:** Practical projects and case studies.
- **Exam Preparation:** Comprehensive preparation for certification exams.

Professional Development:

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

By completing the Certified Kubernetes - AKS Professional Program at Chools, you'll gain the skills, knowledge, and certification needed to excel in Kubernetes and AKS, positioning yourself as a valuable asset to any organization.

Program Objectives

- Master technical skills in Kubernetes and AKS.
- Implement best practices for designing, deploying, and managing Kubernetes solutions.
- Explore Kubernetes and AKS services and architectures.
- Address real-world cloud computing and container orchestration challenges.
- Understand best practices in Kubernetes and AKS.
- Foster continuous learning.
- Encourage teamwork and collaboration.
- Prepare for advanced roles in Kubernetes and AKS.

Expected Outcomes

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

PROGRAM OUTLINE

Stage 1: Fundamentals of Kubernetes & AKS

1. Introduction to Kubernetes
- Core principles and architecture of Kubernetes.
- Key components and functionalities of Kubernetes.
- Benefits and challenges of using Kubernetes for container orchestration.

2. Azure Kubernetes Service (AKS) Overview
- Exploring the features and benefits of AKS.
- Understanding AKS architecture and deployment models.
- Best practices for managing AKS environments.

Stage 2: Advanced Kubernetes Solutions

3. Designing Kubernetes Solutions
- Best practices for designing scalable and reliable Kubernetes solutions.
- Applying Kubernetes architecture patterns and principles.
- Selecting the appropriate Kubernetes services for specific use cases.

4. Kubernetes Security and Compliance
- Ensuring security and compliance in Kubernetes environments.
- Implementing identity and access management with Kubernetes RBAC.
- Understanding data protection, encryption, and compliance requirements.

5. Optimizing Kubernetes Performance
- Techniques for optimizing performance and scalability of Kubernetes solutions.
- Implementing caching, load balancing, and other performance-enhancing services.
- Monitoring and managing resource usage to optimize costs.

6. Kubernetes Deployment and Management
- Managing Kubernetes deployments using tools like Helm, Kubectl, and Terraform.
- Automating deployments and configuration management.
- Best practices for managing and monitoring Kubernetes resources.

Stage 3: Practical Applications

7. Hands-on Kubernetes Projects
- Real-world projects to apply Kubernetes and AKS skills.
- Designing and implementing containerized solutions for various scenarios.
- Collaborating with peers and mentors to solve complex challenges.

8. Kubernetes Integration
- Integrating Kubernetes solutions with existing on-premises and cloud systems.
- Using hybrid cloud solutions to create seamless integrations.
- Best practices for data migration and synchronization.

PROGRAM OUTLINE

Stage 4: Exam Preparation

9. Certification Exam Preparation
- Comprehensive preparation for Kubernetes and AKS certification exams.
- Practice exams and review sessions.
- Exam tips and strategies for success.

10. Advanced Kubernetes Techniques
- Deepening knowledge and exploring advanced Kubernetes capabilities.
- Implementing advanced networking, security, and data management solutions.
- Elective Modules

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

12. AI for Kubernetes
- Implementing AI solutions in Kubernetes environments.

13. Big Data Solutions with Kubernetes
- Managing big data applications in Kubernetes environments.

14. Kubernetes DevOps Practices
- CI/CD pipelines, automation, and containerization with Kubernetes.

15. Kubernetes Project Management
- Leading Kubernetes projects and ensuring successful delivery.

16. IoT Integration with Kubernetes
- Integrating Kubernetes solutions with IoT devices.

Enrollment Now Open!

Take the first step towards becoming a Kubernetes and AKS expert. Enroll in our Certified Kubernetes - AKS Professional Program and enhance your career with Chools.