

Cybersecurity Specialization: Identity and Access Management

Duration: 2 Days Course Code: GK840100

Overview:

Take an in-depth exploration of Identity and Access Management (IAM) practices, designed for professionals seeking to enhance your expertise in this critical domain.

This course is designed to equip you with the essential knowledge and skills to master complex IAM practices and strategies. We will cover various advanced concepts, frameworks, and technologies that are pivotal in securing and managing digital identities within an organization. Students will learn essential IAM concepts and terminology, and understand the four pillars of IAM—Authentication, Authorization, User Management, and Central User Repository—and their significance. This course studies the comprehensive framework of policies, processes, and technologies that underpin effective IAM systems. Through a detailed examination of the IAM lifecycle, from identity provisioning to de-provisioning, students will gain a robust understanding of the principles and benefits of Zero Trust Architecture. Our Cybersecurity Specialization courses follow the 9 pillars of Cybersecurity, providing key skills necessary to be successful as a cybersecurity professional.

Target Audience:

- Experienced IT Security Professionals (Min. 1+ years exp.)
- IAM Administrators
- System and Network Administrators
- IT Managers and Directors
- DevOps Engineers
- Compliance and Risk Management Professionals
- Software Developers and Architects
- Consultants and Advisors

Objectives:

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| ■ Define key concepts and terminology associated with advanced IAM practices. | ■ Analyze the challenges and solutions for IAM in multi-cloud environments. |
| ■ Identify the four pillars of IAM and their significance in identity and access management. | ■ Examine identity analytics and intelligence to detect anomalies and enhance security. |
| ■ Explain the framework of policies, processes, and technologies in IAM. | ■ Evaluate the effectiveness of Privileged Access Management (PAM) solutions in managing privileged accounts. |
| ■ Describe the stages of IAM, from identity provisioning to de-provisioning. | ■ Design a comprehensive IAM framework incorporating policies, processes, and technologies. |
| ■ Understand the principles and benefits of Zero Trust Architecture in IAM. | ■ Develop an advanced IAM solution, integrating IAM with DevOps pipelines and implementing secrets management. |
| ■ Implement advanced authentication mechanisms such as biometric and passwordless authentication. | ■ Create a simple decentralized identity solution using blockchain technology. |
| ■ Configure Attribute-Based Access Control (ABAC) and Policy-Based Access Control (PBAC) policies. | ■ Assess IAM implementations for compliance with regulatory requirements such as GDPR and HIPAA. |
| ■ Set up Single Sign-On (SSO) and Identity Federation between multiple systems. | ■ Review and critique real-world case studies of complex IAM implementations to derive best practices. |
| ■ Conduct role mining and access certification using Identity Governance and Administration (IGA) tools. | ■ Evaluate the impact of emerging trends such as AI, machine learning, and Identity as a Service (IDaaS) on IAM strategies. |

Prerequisites:

- Familiarity with basic IAM concepts and technologies.
- Practical experience with IT systems, networking, and basic security practices.
- A keen interest in learning about advanced IAM technologies and practices.

Content:

Advanced IAM Concepts

- Understanding the Framework of Policies, Processes, and Technologies
- Hands-on Practice: Designing a basic IAM framework including policies and processes using a sample IAM tool
- The Four Pillars of IAM
- Hands-on Practice: Implementing the four pillars in a sample IAM environment
- Advanced Authentication Mechanisms
- Hands-on Practice: Configuring ABAC and PBAC policies using a sample IAM tool
- Identity Federation and SSO
- Hands-on Practice: Setting up SSO and Identity Federation between two systems
- Identity Governance and Administration (IGA)
- Hands-on Practice: Conducting a role mining exercise and setting up an access certification campaign
- Case Studies and Real-World Scenarios
- Interactive Discussion: Group discussion on case studies

Practical Applications and Emerging Trends

- IAM in Multi-Cloud Environments
- Hands-on Practice: Configuring IAM policies across multiple cloud platforms
- Identity Analytics and Intelligence
- Hands-on Practice: Setting up identity analytics and creating custom reports and alerts
- Blockchain and Decentralized Identity
- Hands-on Practice: Creating a simple decentralized identity solution using blockchain
- IAM Compliance and Regulatory Requirements
- Hands-on Practice: Conducting a compliance audit and generating required reports
- Stages of IAM
- Hands-on Practice: implementing lifecycle management stages in a sample IAM tool
- Emerging Trends in IAM
- Interactive Discussion: Group discussion on the impact of emerging trends

Further Information:

For More information, or to book your course, please call us on 0800/84.009

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