

# DATA SECURITY ESSENTIALS

## **COURSE OVERVIEW**

Data security is a critical component of modern business operations, ensuring the protection of sensitive information against unauthorized access, breaches, and other cyber threats. This course provides participants with a comprehensive understanding of data security principles, best practices, and regulatory requirements. It covers key aspects such as risk management, encryption, access control, network security, and incident response. Participants will gain the knowledge needed to identify potential security vulnerabilities and implement effective measures to safeguard organizational data. This course is designed to empower professionals with the essential skills and tools required to maintain data integrity and confidentiality in various business environments.

## **TARGET COMPETENCIES**

- Data protection
- Risk management
- Access control
- Encryption methods
- Threat identification
- Compliance standards
- Network security

## **COURSE OBJECTIVES**

By the end of the course, participants will be able to:

- Identify key data security risks and threats.
- Implement effective access control measures.
- Apply encryption techniques to protect data.
- Monitor network activities for security breaches.
- Evaluate compliance with data protection regulations.
- Develop incident response plans.
- Assess organizational security policies.

## **TARGET AUDIENCE**

This course is intended for professionals responsible for managing or supporting data security within their organizations.

Suitable for:

IT Managers, Security Analysts, Compliance Officers, Risk Managers, Network Administrators, System Administrators, Data Protection specialists.

## **NOTE**

Participants must bring their own laptops running Microsoft Windows only with a modern web browser installed.

# **COURSE METHODOLOGY**

Instructor-led training sessions supported by practical examples, demonstrations, group discussion and real-world business scenarios.

## **COURSE OUTLINE**

### **INTRODUCTION TO DATA SECURITY**

- Definition of data security.
- Importance of data protection in business.
- Common types of data breaches.
- Legal and ethical implications of data breaches.

### **RISK MANAGEMENT IN DATA SECURITY**

- Components of risk assessment.
- Categories of security threats.
- Risk mitigation strategies.
- Business impact of security risks.

### **ACCESS CONTROL AND AUTHENTICATION**

- Types of access control models.
- Role of identity verification.
- Multi-factor authentication methods.
- User privilege management.

### **ENCRYPTION AND DATA PROTECTION TECHNIQUES**

- Principles of data encryption.
- Symmetric and asymmetric encryption types.
- Data masking and tokenization techniques.
- Storage and transmission security.

### **NETWORK AND ENDPOINT SECURITY**

- Network security protocols.
- Firewalls and intrusion detection systems.
- Endpoint protection strategies.
- Secure configuration of devices.

### **REGULATORY COMPLIANCE AND STANDARDS**

- Overview of data protection laws.
- Key provisions of GDPR, HIPAA, CCPA and SDAIA.
- Industry-specific compliance requirements.
- Organizational compliance strategies.

### **INCIDENT RESPONSE AND RECOVERY**

- Incident detection techniques.
- Steps in incident response process.
- Data breach notification requirements.
- Post-incident recovery measures.

### **SECURITY POLICIES AND BEST PRACTICES**

- Elements of an effective security policy.
- Roles and responsibilities in security management.
- Security awareness training principles.
- Policy enforcement mechanisms.

### **EMERGING TRENDS IN DATA SECURITY**

- Cloud security considerations.
- Mobile device security risks.
- Artificial intelligence in cybersecurity.
- Future challenges in data protection.

### **AUDIT AND MONITORING**

- Importance of security audits.
- Tools for continuous monitoring.
- Log management practices.
- Reporting and documentation standards.

To register or for complete course information

Office: +971 4 430 8394 | WhatsApp: +971 50 454 9895 | Email: [courses@viftraining.com](mailto:courses@viftraining.com)

web: [www.viftraining.com](http://www.viftraining.com)