# Certified Information Security Manager Study Guide Exam CISM

### **CONTENTS AT A GLANCE**

Chapter 1	Becoming a	<b>CISM</b>
-----------	------------	-------------

**Chapter 2** Information Security Governance

**Chapter 3** Information Risk Management

**Chapter 4** Information Security Program Development and Management

**Chapter 5** Information Security Incident Management

Glossary

Index

## **CONTENTS**

Acknowledgments Introduction

#### **Chapter 1** Becoming a CISM

Benefits of CISM Certification

Becoming a CISM Professional

**Experience Requirements** 

**ISACA Code of Professional Ethics** 

The Certification Exam

**Exam Preparation** 

Before the Exam

Day of the Exam

After the Exam

**Applying for CISM Certification** 

**Retaining Your CISM Certification** 

**Continuing Education** 

**CPE Maintenance Fees** 

**Revocation of Certification** 

**Summary** 

#### **Chapter 2** Information Security Governance

Introduction to Information Security Governance

Reason for Security Governance

Security Governance Activities and Results

**Business Alignment** 

Exam-Labs - 100% Real IT Certification Exam Dumps www.exam-labs.com

Roles and Responsibilities

Monitoring Responsibilities

**Information Security Governance Metrics** 

The Security Balanced Scorecard

**Business Model for Information Security** 

**Security Strategy Development** 

**Strategy Objectives** 

**Control Frameworks** 

**Risk Objectives** 

**Strategy Resources** 

**Strategy Development** 

**Strategy Constraints** 

**Chapter Review** 

**Notes** 

Questions

**Answers** 

#### **Chapter 3** Information Risk Management

**Risk Management Concepts** 

The Importance of Risk Management

Outcomes of Risk Management

Risk Management Technologies

Implementing a Risk Management Program

Risk Management Strategy

Risk Management Frameworks

Risk Management Context

Gap Analyses

**External Support** 

The Risk Management Life Cycle

The Risk Management Process

Risk Management Methodologies

Asset Identification and Valuation

**Asset Classification** 

**Asset Valuation** 

Threat Identification

Vulnerability Identification

**Risk Identification** 

Risk, Likelihood, and Impact

Risk Analysis Techniques and Considerations

**Operational Risk Management** 

Risk Management Objectives

Risk Management and Business Continuity

Planning

Third-Party Risk Management

The Risk Register

Integration of Risk Management into Other

**Processes** 

Risk Monitoring and Reporting

**Key Risk Indicators** 

Training and Awareness

**Risk Documentation** 

**Chapter Review** 

Notes

Questions

**Answers** 

## **Chapter 4** Information Security Program Development and Management

**Information Security Programs** 

**Outcomes** 

Charter

Scope

Information Security Management Frameworks

Defining a Road Map

**Information Security Architecture** 

**Security Program Management** 

Security Governance

Risk Management

The Risk Management Program

The Risk Management Process

Risk Treatment

**Audits and Reviews** 

**Policy Development** 

Third-Party Risk Management

Administrative Activities

#### **Security Program Operations**

**Event Monitoring** 

**Vulnerability Management** 

Secure Engineering and Development

**Network Protection** 

**Endpoint Protection and Management** 

**Identity and Access Management** 

Security Incident Management

**Security Awareness Training** 

Managed Security Services Providers

**Data Security** 

**Business Continuity Planning** 

#### IT Service Management

Service Desk

**Incident Management** 

**Problem Management** 

Change Management

Configuration Management

Release Management

Service-Level Management

Financial Management

Capacity Management

Service Continuity Management

**Availability Management** 

**Asset Management** 

#### Controls

**Control Classification** 

**Internal Control Objectives** 

**Information Systems Control Objectives** 

**General Computing Controls** 

**Control Frameworks** 

**Controls Development** 

**Control Assessment** 

Metrics and Monitoring

Types of Metrics

Audiences

Continuous Improvement

**Chapter Review** 

**Notes** 

Questions

**Answers** 

#### **Chapter 5** Information Security Incident Management

Security Incident Response Overview

Phases of Incident Response

Incident Response Plan Development

**Objectives** 

Maturity

Resources

Roles and Responsibilities

**Gap Analysis** 

Plan Development

Responding to Security Incidents

Detection

**Initiation** 

**Evaluation** 

Eradication

Recovery

Remediation

Closure

Post-incident Review

**Business Continuity and Disaster Recovery Planning** 

**Business Continuity Planning** 

Disaster Recovery Planning

Testing BC and DR Plans

**Chapter Review** 

Notes

Questions

**Answers** 

#### **Appendix** About the Download

**System Requirements** 

**Installing and Running Total Tester** 

**About Total Tester** 

**Technical Support** 

**Glossary** 

**Index** 

## **Figure Credits**

Figure 2-2 Adapted from The Business Model for Information Security, ISACA.

Figure 2-4 Adapted from The University of Southern California, Marshall School of Business, Institute for Critical Information Infrastructure Protection, USA.

Figure 2-5 Courtesy Xhienne: SWOT pt.svg, CC BY-SA 2.5, https://commons.wikimedia.org/w/index.php? curid=2838770.

Figure 2-6 Courtesy High Tech Security Solutions Magazine.

Figure 3-2 Source: National Institute for Standards and Technology.

Figure 4-1 Courtesy The Open Group.

Figure 4-9 Courtesy Bluefoxicy at en.wikipedia.org.

Figure 5-3 Source: NASA.

## **Purpose of This Book**

Let's get the obvious out of the way: this is a comprehensive study guide for the security management professional who needs a serious reference for individual or group-led study for the Certified Information Security Manager (CISM) certification. The content in this book contains the technical information that CISM candidates are required to know. This book is one source of information to help you prepare for the CISM exam but should not be thought of as the ultimate collection of all the information and experience that ISACA expects qualified CISM candidates to possess. No one publication covers all of this information.

This book is also a reference for aspiring and practicing IT security managers and CISOs. The content that is required to pass the CISM exam is the same content that practicing security managers need to be familiar with in their day-to-day work. This book is an ideal CISM exam study guide as well as a desk reference for those who have already earned their CISM certification.

This book is also invaluable for information security professionals who are not in a leadership position today. You will gain considerable insight into today's information security management challenges. This book is also useful for IT and business management professionals who work with information security leaders and need to better understand what they are doing and why.

This book is an excellent guide for anyone exploring a security management career. The study chapters explain all the relevant technologies, techniques, and processes used to manage a modern information security program. This is useful if you are wondering what the security management profession is all about.

## **How This Book Is Organized**

This book is logically divided into four major sections:

• **Introduction** The "front matter" of the book and Chapter 1 provide an overview of the CISM certification and the information security



management profession.

- **CISM study material** Chapters 2 through 5 contain everything a studying CISM candidate is responsible for. This same material is a handy desk reference for aspiring and practicing information security managers.
- **Glossary** There are more than 550 terms used in the information security management profession.
- **Practice exams** Appendix explains the online CISM practice exam and Total Tester software accompanying this book.