# DVMS Professional™ 800-53 Practitioner Syllabus

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**tso**
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# Contents

# Introduction

This document provides the learning outcomes for the course and the assessment criteria used. It also provides an overview of the examination design regarding the types of question asked.

Starting with Chapter 2, the table below shows the allocated number of exam marks for each chapter and the associated Bloom's level.

The examinable materials include the relevant books in the DVMS series (*A Practitioner's Guide to Adapting the NIST Cybersecurity Framework* and *Fundamentals of Adopting the NIST Cybersecurity Framework*), the course materials, the course workshops, the lecture notes, and the exercises.

The Marks column applies to the Implementor and the Assessor examinations. The notation in the Book reference column refers to sections in the Practitioner guide. The notation "ff" is used to refer to all subsections inclusively (e.g., 2.2ff means section 2.2 and all subsections through to 2.2.5). Any figures or tables included in the listed sections are also part of the study material.

# Syllabus

| Ref. # | Chapter | Learning outcomes | Book reference | Marks | Bloom's level |
|---|---|---|---|---|---|
| **1.0** | **Be the menace within – a proactive approach** | **Establish an understanding of the threat landscape to facilitate a proactive approach to cyber resilience within the context of strategy-risk** | | **4** | |
| **1.1** | | Understand how threat actors think to support being proactive and to protect the organization | 2.1.7–2.1.8, 2.2ff | | 3 |
| **1.2** | | Uncover the role of questions to establish current organizational vulnerabilities | 2.1, 2.1.1–2.1.6 | | 4–5 |
| **1.3** | | Identify and prioritize business systems to enable cyber resilience | 2.1.9–2.1.10 | | 4 |
| **1.4** | | Understand strategy-risk as a step to proactively probe for vulnerabilities using insider knowledge | 2.3ff | | 4 |
| **2.0** | **Systems: simple, complex, complicated, and resilient** | **Establish an understanding of systems thinking and how to use it to affect change and build a cyber-resilient organization** | | **8** | |
| **2.1** | | Establish an understanding of a complex adaptive system (including a bi-directional relationship between system behavior and system structure) | 3.1ff, 3.2–3.2.1 | | 4 |
| **2.2** | | Understand organizational culture and its relationship to knowledge management within a system | 3.3, 3.3.1 | | 4 |
| **2.3** | | Understand how the 3D knowledge model supports the flow of communication, work, and innovation | 3.3.1.1–3.3.1.2 | | 4 |

| Ref. # | Chapter | Learning outcomes | Book reference | Marks | Bloom's level |
|--------|---------|-------------------|----------------|-------|---------------|
| 2.4 | | Understand system leverage points, and how they fit with adaptive resilience | 3.2.2ff | | 3 |
| 2.5 | | Understand how to apply leverage to a system to affect change | 3.2.3, 3.4.2, 7.2.2 | | 4 |
| 3.0 | **Cybersecurity and the Digital Value Management System™** | **Establish an understanding of the Digital Value Management System (DVMS) as part of an approach to manage digital business risk and achieve the desired cybersecurity posture** | | **10** | |
| 3.1 | | Develop an understanding of the DVMS and the Z-X Model capabilities | 4, 4.1, 4.1.1ff | | 4 |
| 3.2 | | Explore the Digital Value Capability Maturity Model and its relationship to performance measurement | 4.1.2ff | | 4–5 |
| 3.3 | | Establish a systems view of the CPD (create, protect, and deliver) Model | 7.4ff | | 4–5 |
| 4.0 | **Adapting the way we work** | **Understand the role of adoption and adaptation in achieving the desired cybersecurity posture** | | **10** | |
| 4.1 | | Understand how adoption impacts governance, and how assurance and adaptation impact management | 5, 5.1ff | | 4 |
| 4.2 | | Identify how adoption and adaptation rely on a principled approach to create, protect, and deliver digital business value | 5.2ff | | 4 |
| 4.3 | | Discover how to organize to create, protect, and deliver digital business value | 5.3ff | | 4 |
| 4.4 | | Understand and apply the DVMS FastTrack™ approach (including FastTrack, Z-X Model, agility, and innovation) | 5.4ff, 5.5ff | | 4–5 |
| 5.0 | **Cybersecurity within a system** | **Establish an understanding of the relationship between systems thinking and the Z-X Model practice areas, cybersecurity controls, and the DVMS FastTrack approach** | | **20** | |
| 5.1 | | Understand and explain why and how it's essential to take a systems thinking approach to cybersecurity | 6, 6.1, 6.2, 6.3 | | 4 |
| 5.2 | | Understand and explain the relationships between the cybersecurity control families and the Z-X Model practice areas | 6.1.1ff, 6.1.2ff, 6.1.3ff, 6.1.4ff, 6.1.5 | | 4–5 |
| 5.3 | | Understand and explain the phased approach to implementing cybersecurity controls | 6.3ff | | 4–5 |

| Ref. # | Chapter | Learning outcomes | Book reference | Marks | Bloom's level |
|---|---|---|---|---|---|
| **6.0** | **Digital business risk management** | **Establish an understanding of how mental models and the DVMS practice areas fit to support digital business risk management** | | **8** | |
| **6.1** | | Establish an understanding of the relationship between mental models and outcomes | 7.1 | | 4 |
| **6.2** | | Explore the DVMS/Z-X Model capabilities in the context of cybersecurity | 7.2ff | | 4 |
| **6.3** | | Explore the DVMS/Z-X Model practice areas | 7.3ff | | 4 |
| **7.0** | **The DVMS as a scalable overlay** | **Establish an understanding of the three layers of the DVMS Model and how they form a scalable overlay adaptable to organizations of any size** | | **5** | |
| **7.1** | | Establish an understanding of the DVMS layers and what each layer represents | 8.1, 8.1.1 | | 3 |
| **7.2** | | Establish an understanding of how the layers fit together to form a scalable overlay | 8.1.2–8.1.3 | | 3 |
| **7.3** | | Establish an understanding of how the DVMS supports continual innovation | 8.2ff | | 4 |

# Examination design and administration

## Duration

150 minutes

## Number of questions

65

## Level of knowledge

Bloom's level:

3 – Apply

4 – Analyze

5 – Evaluate

## Delivery

Online, proctored

Prerequisites: Successful completion of the successful completion of the DVMS Professional™ 800-53 Practitioner course.

## Format

The open-book examination has 65 multiple-choice questions with a single correct answer from four choices (A, B, C, D).

Questions may appear in the following forms (sample, not an exhaustive list):

- Which of the following statements addresses X?
- How would you show Y?
- How is this similar to … ?
- What is … ?
- What is missing from … ?
- _____ is a correct way to … ?
- How would you describe … ?
- What is the main idea of … ?
- What are the possible outcomes?
- What are some of the problems with … ?
- Which is the correct approach given … ?
- The questions may appear in combination with: Why … ?

## Scoring

Each correct answer is worth 1 point. A score of 60% (39 correct out of 65) is required to pass the examination.

## Examination conduct

Upon successfully completing the course, students will be given a voucher to take the examination at their discretion and timing.