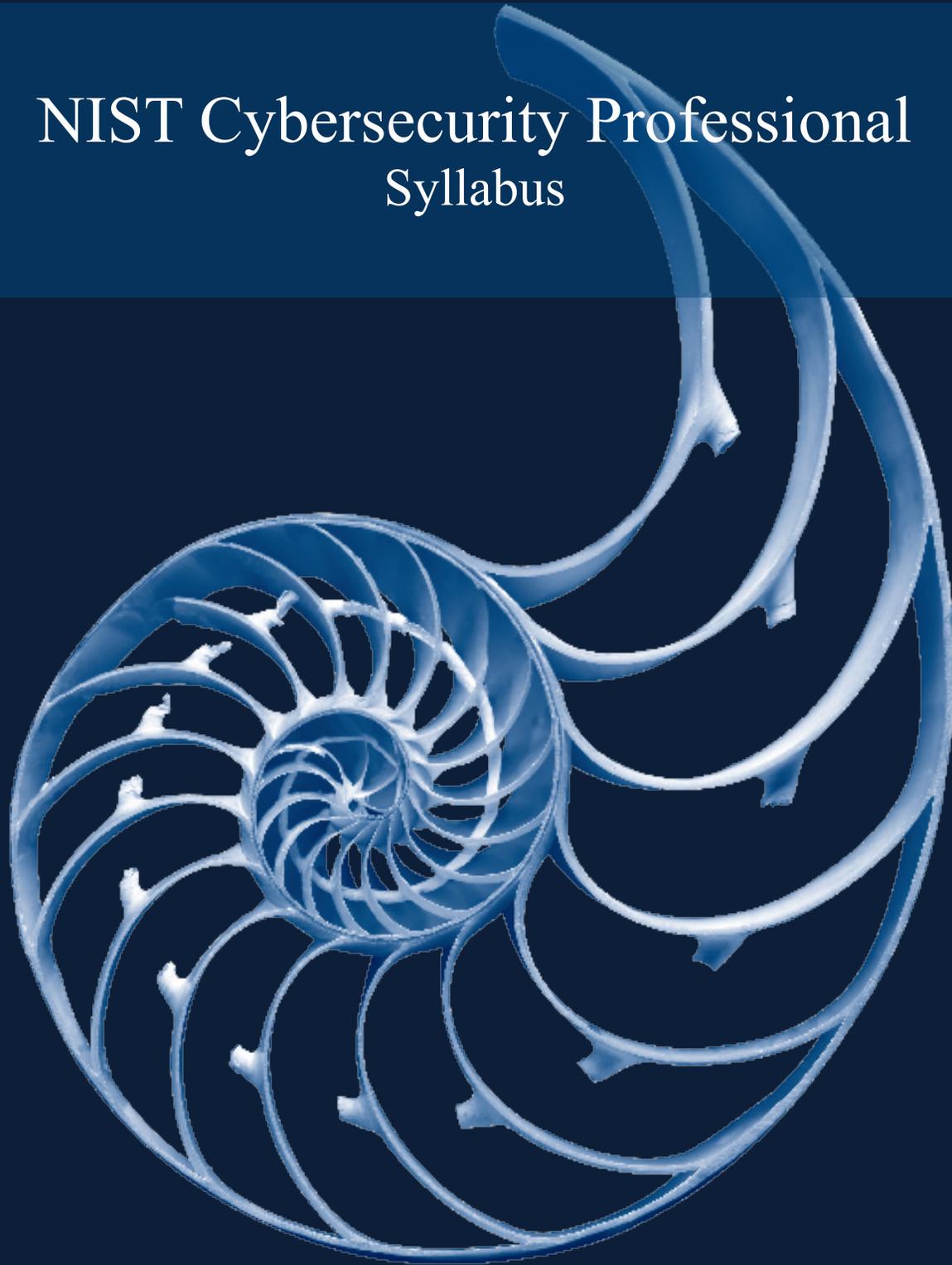


NIST Cybersecurity Professional Syllabus



*Based on Framework for Improving Critical
Infrastructure Cybersecurity - Version 1.1*

itSM912 NCSP Practitioner

Version 2.0, November 2019

Syllabus

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Introduction

The purpose of this document is to provide the course description, target audience, and learning outcomes for the NIST Nist Cybersecurity Professional (NCSP) course. The learning outcomes include the number of exam marks allocated to each chapter. It does not include sample questions or the certification exam process.

Syllabus

Learning Outcome	Chapter	Learning Outcome	Marks	Bloom's 1 & 2	Bloom's 3 & 4
1.0	Digital Transformation	Explores what the Practitioner needs to know about the relationship between digital transformation and cybersecurity.	3	3	0
1.1		Explain how to determine the impact of cybersecurity on DX.			
1.2		Explain the relationships between culture and digital transformation from the perspective of a practitioner.			
1.3		Explain the delivery of value to stakeholders in a DX & cybersecurity environment.			
g1.4		Illustrate the interdependent relationship between cybersecurity and DX.			
2.0	Threat Landscape	The Practitioner needs to understand what threat actors do and their capabilities.	8	4	4
2.1		Compare the evolving attack type impact to the threat environment.			
2.2		Apply knowledge about the threat landscape to maintain a readiness to respond.			
2.3		Develop a risk profile based on business impact analysis			
2.4		Establish the relationship between awareness and training in the continual improvement of cybersecurity posture.			
2.5		Develop and treat training & awareness as a critical aspect of deterrence			
2.6		Use knowledge about the threat landscape as a predicate to the adoption and adaptation of your cybersecurity posture.			
3.0	The Controls	This chapter provides a sample set of controls based on an informative reference.	10	6	4
3.1		Understand the purpose goals & objectives for each control.			
3.1a		Characterize & explain the informative reference controls			
3.2		Discover how to apply the controls in an organizational context.			

4.0	Adopt & Adapt	Adopt is a decision about governance; adapt is the set of management decisions that result from the decision to adopt.	10	3	7
4.1		Distinguish Adopt, Adapt, Management & Governance.			
4.2		Develop an approach to adoption & adaptation.			
4.3		Distinguish & demonstrate the impact of organizational culture on developing cybersecurity as a capability.			
4.4		Develop an assessment approach to define current state.			
5.0	Adaptive Way of Working	Threat actors are agile and highly adaptive. The cybersecurity Practitioner must develop the same capabilities	10	3	7
5.1		Break down what constitutes an adaptive approach.			
5.2		Characterize & apply the need for cross-functional teams.			
5.3		Recognize and prioritize the first steps (get started).			
5.4		Demonstrate & establish cybersecurity phases.			
5.5		Break down the impact of the flows.			

6.0	Rapid Adoption & Rapid Adaptation FastTrack™	FastTrak™ is an approach to allow organizations to learn to adapt to an evolving threat landscape rapidly.	12	3	9
6.1		Approach			
6.1a		Establish what it takes to adopt CS.			
6.1b		Determine how that impacts management adaptation of CS.			
6.1c		Determine how that impacts the capability to assess.			
6.2		CS Capability			
6.2a		Determine the gap between existing & needed capabilities.			
6.2b		Establish what must be developed.			
6.2c		Develop appropriate risk management profile.			
6.3		Discover how cybersecurity impacts people, practice & technology impacts organization.			
6.4		Differentiate CIS Implementation groups.			
6.5		Determine appropriate implementation group & approach.			
6.6		Develop appropriate phase approaches.			
7.0	CIIS Practice	Cybersecurity is an ongoing game of cat and mouse. Organizations must learn how to inculcate cybersecurity improvement into their DNA.	12	3	9
7.1		Break down & develop mechanisms for ongoing cybersecurity improvement that includes developing a learning organization.			
7.2		Illustrate an improvement plan based on the NIST 7-Step Approach.			
7.3		Illustrate an improvement plan based on the Improvement GPS.			
7.4		Demonstrate understanding of Cybersecurity Maturity Model Certification			
7.5		Break down the balancing loop & how it fits into the escalation archetype.			
7.6		Use the Fast Track™ (improvement & implementation) cycles.			

Examination Design and Administration

Duration:

120 minutes

Number of questions:

65

Level of knowledge:

Bloom's level:

3 – Analysis

4 -- Application

Delivery:

Paper-based, proctored classroom

Online, proctored

Recommended pre-requisites: itSM NCSP Foundation

Format:

This is a closed book exam with sixty-five (65) multiple-choice questions with a single correct answer from 4-choices (A, B, C, D).

Questions may appear in any of the following forms (sample, not an exhaustive list).

- Which of the following is true, correct, most correct?
- Which of the following statements is NOT correct?
- Which of the following statements addresses X?
- How would you show Y?
- What is...?
- What is missing from...?
- _____ is a correct way to...?
- How would you describe...?
- How would you explain...?
- What is the main idea of...?
- Which is the best choice...?
- Which is correct...?
- Which is the correct approach given...?
- Any of the following may be combined with: Why...?

Scoring:

Each correct answer is worth 1 point. Passing is 60% (39 correct out of 65).

Examination Design and Administration as Part of the NCSP Bootcamp

Duration:

135 minutes

Number of questions:

90

Level of knowledge:

Bloom's level:

1 – Knowledge

2 -- Comprehension

3 – Analysis

4 -- Application

Delivery:

Paper-based, proctored classroom

Online, proctored

Recommended pre-requisites: itSM NCSP Foundation

Format:

This is a closed book exam with sixty-five (65) multiple-choice questions with a single correct answer from 4-choices (A, B, C, D).

Questions may appear in any of the following forms (sample, not an exhaustive list).

- Which of the following is true, correct, most correct?
- Which of the following statements is NOT correct?
- Which of the following statements addresses X?
- How would you show Y?
- What is...?
- What is missing from...?
- _____ is a correct way to...?
- How would you describe...?
- How would you explain...?
- What is the main idea of...?
- Which is the best choice...?
- Which is correct...?
- Which is the correct approach given...?
- Any of the following may be combined with: Why...?

25 multiple choice Bloom's Level 1 & 2 questions

65 Multiple choice Bloom's Level 3 & 4

Scoring:

Each correct answer is worth 1 point. Passing is 60% (54 correct out of 90).

