



## NIST Cyber Security Professional (NCSP) Foundation Certification Video Training Course Outline

[www.itsmsolutions.com](http://www.itsmsolutions.com)

### Course Introduction

Course Introduction

### Chapter 1 - Course Introduction

#### **Lesson: Course Organization**

Welcome to the Course!  
Why Are You Here?  
Using Bloom's Taxonomy  
What do you Expect?  
Housekeeping  
Getting Started in the Classroom

#### **Lesson: Course Resources**

Course Materials  
Syllabus  
Student Manual  
Your Day & Quizzes  
My ITSM Mentoring Community

NCSP Foundation Certification Exam  
Agenda-NCSP Foundation  
**Lesson: NIST-CSF “Setting the Stage”**  
The Context  
NIST Cybersecurity Framework  
The Story  
Let’s Get Started  
Checkpoint

## **Chapter 2 - Digital Transformation: Becoming Digital**

### **Digital Transformation**

Introduction

Learning Outcomes

#### **Lesson: Basics of Digital Transformation**

What is Digital Transformation?

Transformation – Industrial to Digital Era

Digital Transformation & Critical Infrastructure

Digital Transformation: Attributes of the Digital Enterprise

#### **Lesson: Becoming Digital**

Digital Transformation from the Corner Office

Becoming “Digital”

Optimized Rate of Change

Outside-in, Putting Customers First

Transforming the Enterprise

#### **Lesson: Cybersecurity & Digital Transformation**

Role of Cybersecurity in Digital Transformation

Cybersecurity & Critical Infrastructure

Digital Transformation: Basic Principles (THRIVE)

Digital Transformation Impacts Many Areas

Cybersecurity: Key DX Challenges

#### **Lesson: DX & the Framework**

Digital Transformation & NIST Cybersecurity Framework (CSF)

Basic Review of Cybersecurity Practices

Establish or Improve Cybersecurity Program

Communicate CS Requirements with Stakeholders

Buying Decisions

Identify Opportunities for New or Revised Informative References

Methodology to Protect Privacy & Civil Liberties

#### **Summary: Digital Transformation**

Knowledge Check – Things you should know

Checkpoint

## **Chapter 3 - Understanding Cyber Risks**

## **Understanding Cyber Risks**

Introduction

Learning Outcomes

### **Lesson: Cyber Risk Equation**

The Problem

Profile of an Attack

Phases of the Kill Chain

MITRE Attack Framework

MITRE Enterprise ATT&CK Framework

The Cyber Risk Equation

Evaluating the Results – What does it all mean?

### **Lesson: Cyber Risk Components**

Cyber Risk Components: Threats

Threats

Cyber Risk Components: Business & Technical Vulnerabilities

Vulnerabilities

Cyber Risk Components: Assets & Information

Asset Value

Cyber Risk Components: Controls

Controls

Cyber Risk: Fighting Back

Risk

### **Lesson: Basics of Cyber Risk Assessment**

Risk Assessments

Risk Management Process

Frame the Risk

Assess the Risk

Respond to the Risk

Monitor the Risk

Key Risk Concepts

Risk Framing Components & Relationships

Organizational Risk Frame

### **Summary: Understanding Cyber Risks**

Knowledge Check – Things you should know

Checkpoint

## **Chapter 4 - NIST Cybersecurity Framework Fundamentals**

### **NIST Cybersecurity Framework Fundamentals**

Introduction

Learning Outcomes

### **Lesson: NIST-CSF Overview**

Cybersecurity Framework: Origins

Key Attributes of NIST-CSF

The Framework is for Organizations ...

The Framework Components

NIST Cybersecurity Framework Components

NIST Cybersecurity Framework as a Guide

The Key Areas of Focus  
Why Adopt the NIST CSF?  
Benefits of Adopting NIST-CSF  
Evolution of NIST-CSF  
**Lesson: Framework Core, Tiers & Profiles**  
NIST-CSF Core Functions  
Core Function: Goals and Objectives  
Framework Core Approach  
NIST-CSF Tier  
NIST-CSF Implementation Tiers  
Key Properties of Cyber Risk Management  
Implementation Tiers Approach  
Implementation Tiers Example  
NIST CSF Framework Profiles  
Thinking about a Profile  
Profile Information Input  
Seven-Step Process  
Core, Tiers, Profiles Example  
**Summary: NCSF Fundamentals**  
Knowledge Check – Things you should know  
Checkpoint

## **Chapter 5 - Core Functions, Categories & Subcategories: Organizational Cybersecurity Capab**

### **Core Functions, Categories & Subcategories**

Introduction  
Learning Outcomes  
The Five Core Functions  
Framework Core Structure  
Framework Categories, Subcategories, References  
**Lesson: Identify**  
Core Function Identify - Purpose, Goals & Objectives  
Identify: Framework Categories  
Core Function Identify: Subcategories (AM & BE)  
Core Function Identify: Subcategories (GV & RA)  
Core Function Identify: Subcategories (RM & SC)  
**Lesson: Protect**  
Core Function Protect - Purpose, Goals & Objectives  
Protect: Framework Categories  
Core Function Protect: Subcategories (AC & AT)  
Core Function Protect: Subcategories (DS)  
Core Function Protect: Subcategories (IP)  
Core Function Protect: Subcategories (MA & PT)  
**Lesson: Detect**  
Core Function Detect - Purpose, Goals & Objectives  
Detect: Framework Categories  
Core Function Detect: Subcategories (AE & CM)  
Core Function Detect: Subcategories (DP)

**Lesson: Respond**

Core Function Respond - Purpose, Goals & Objectives

Respond: Framework Categories

Core Function Respond: Subcategories (RP & CO)

Core Function Respond: Subcategories (AN, MI & IM)

**Lesson: Recover**

Core Function Recover - Purpose, Goals & Objectives

Recover: Framework Categories

Core Function Recover: Subcategories (RP, IM & CO)

**Lesson: Informative References**

Informative References

Tailor to Suit

Exploring CIS 20 Critical Controls

Critical Security Controls Overview

CIS Controls – Key Principles for v7.1

CIS Controls-v7

Basic - CIS Controls 1 to 6

CIS-01 to 06 Mapped to NIST Core Functions

Foundational - CIS Controls 7 to 11

Foundational - CIS Controls 12 to 16

CIS-07 to 16 Mapped to NIST Core Functions

Organizational – CIS Controls 17 to 20

CIS-17 to 20 Mapped to NIST Core Functions

**Summary: Core Functions, Categories & Subcategories**

Knowledge Check – Things you should know

Checkpoint

**Chapter 6 - Implementation Tiers & Profiles: Understanding Current & Future Capabilities****Implementation Tiers & Profiles**

Introduction

Learning Outcomes

**Lesson: Understanding Tiers**

NIST Cybersecurity Framework - Tiers

Implementation Tiers

Implementation Tier Objectives

Tier 1: Partial

Tier 2: Risk Informed

Tier 3: Repeatable

Tier 4: Adaptive

Risk Management Practices

Example - Implementation Tiers & Their Use

**Lesson: Understanding Profiles**

Developing Framework Profiles

Profiles

Framework Profiles

Profile – An Example

**Lesson: Creating Profiles**

Using the Risk Assessment to Create the Profile

Identify Function: Asset Management Profile

Protect Function: Data Security

Detect Function: Detection Process

Respond Function: Analysis

Recover Function: Recovery Planning

**Summary: Developing Framework Profiles**

Knowledge Check – Things you should know

Checkpoint

## **Chapter 7 - Cybersecurity Improvement: Getting “there” from “here”**

### **Cybersecurity Improvement**

Introduction

Learning Outcomes

**Lesson: Adopt & Adapt**

Adopt – The Decision to Move Forward with NIST-CSF

Adapt – Tailor NIST to Your Context

Principles of Adaptation

Customer Drives Value

Start Where You Are

Simplify Everything

Adopt & Apply Systems Thinking

Change is an Organizational Capability

Technology is a Means, Not an End

Create to Overcome Entropy

**Lesson: Implement & Improve**

Fast Track Concepts

NCSF-Fast Track Controls (NCSF-FT)

Fast Track – Implement/Improve Cycles

Adaptive Approach Reduces Waste, Delivers Value

**Lesson: Continual Implementation & Improvement System (CIIS) as a Practice**

CIIS Approach

Seven Step Approach

Step 1: Prioritize & Scope

Step 2: Orient

Step 3: Create a Current Profile

Step 4: Conduct a Risk Assessment

Step 5: Create a Target Profile

Step 6: Determine, Analyze, & Prioritize Gaps

Step 7: Implement Action Plan

**Summary: Cybersecurity Improvement**

Knowledge Check – Things you should know

Checkpoint