



# **DxCERTS<sup>SM</sup>**

**IT & NIST Cybersecurity  
Career Pathway Training Curriculum  
& Student Management Platform**

**By**

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## **DxCERTS - IT & NIST Cybersecurity Career Pathway Training Curriculum and Student Management Platform**

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### ***IT & NIST Cybersecurity Career Pathway Training Curriculum***

Today, due to the ever changing threat landscape created by Digital Transformation (DX) programs (IoT, Mobile, Cloud etc.) and a very sophisticated network of threat actors (i.e., the bad guys) enterprises need to build a workforce capable of engineering, maintaining and improving the best practice frameworks and methodologies required to identify, protect, detect, respond and recover from cyber-attacks.

itSM Solutions NISTCSF.COM is a global consortium of academic, government and industry thought leaders working together to create Digital Transformation (DX) Training Curriculum and Platforms (DxCERTS<sup>SM</sup>) that teach the knowledge, skills and abilities to operationalize the IT and NIST Cybersecurity frameworks, methodologies and technologies created by the **National Institute of Standards and Technologies (NIST), Axelos, ISACA and other internationally recognized institutes and organizations.**

The consortium's focus is to create online training curriculum that can be delivered in an instructor led classroom, virtual classroom, blended classroom or as a standalone self-paced video program.

The consortium is also focused on delivering online train-the-trainer services that will enable academic and enterprise institutions to utilize existing resources to support the delivery or mentoring portion of its IT & NIST Cybersecurity workforce development and continuing education program.

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The consortium's UMass Lowell NIST Cybersecurity Framework NCSF-CFM certification training programs were recently featured in the [National CyberWatch Center 2018 Innovations in Cybersecurity Education magazine](#).

### ***DxCERTS IT & NIST Cybersecurity Career Pathways Curriculum***

DxCERTS is the industry's first online IT & NIST Cybersecurity career pathway training curriculum & student management platform designed specifically for K-12, higher education and enterprise learning & development organizations.

DxCERTS career pathway programs are aligned with the industry leading IT & Cybersecurity frameworks being operationalized by organizations across the globe. These frameworks include the NIST Cybersecurity Framework, NICE Cybersecurity Workforce Framework, ITIL, RESILIA, Cobit and the Digital Transformation Readiness Framework.

The online curriculum includes eight IT & NIST Cybersecurity career pathway programs plus one Business Soft Skill track which are designed to fit seamlessly into any existing academic or Learning & Development instructor-led or self-paced program.

# DxCERTS - IT & NIST Cybersecurity Career Pathway Training Curriculum and Student Management Platform

DxCERTS Enterprise Curriculum Pathways	Digital Transformation Readiness Framework Curriculum	NIST Cybersecurity & RESILIA Cyber Resilience Framework Curriculum	Digital Service Management & Digital Governance Framework Curriculum	NICE Cybersecurity Workforce Framework Information Security Curriculum	NICE Cybersecurity Workforce Framework Network & System Admin Curriculum	NICE Cybersecurity Workforce Framework Management Curriculum	NICE Cybersecurity Workforce Framework Software Engineering Curriculum	NICE Cybersecurity Workforce Framework Project Management Curriculum	NICE Cybersecurity Workforce Framework Business Skills Curriculum
Pathway Description	This DxCERTS training and mentoring program enables students to learn the knowledge, skills and abilities to operationalize the digital transformation best practices outlined in the Digital Transformation Readiness Framework	This DxCERTS training and mentoring program enables students to learn the knowledge, skills and abilities to operationalize the cybersecurity and cyber resilience best practices outlined in the NIST Cybersecurity and RESILIA Cyber Resilience Frameworks	This DxCERTS training and mentoring program enables students to learn the knowledge, skills and abilities to operationalize the Service Management and Governance best practices outlined in the ITIL and COBIT Frameworks	This DxCERTS training and mentoring program enables students to learn the knowledge, skills and abilities to perform the information security workforce roles outlined in the NICE Cybersecurity Framework	This DxCERTS training and mentoring program enables students to learn the knowledge, skills and abilities to perform the networking and administration workforce roles outlined in the NICE Cybersecurity Framework	This DxCERTS training and mentoring program enables students to learn the knowledge, skills and abilities to perform the cloud management workforce roles outlined in the NICE Cybersecurity Framework	This DxCERTS training and mentoring program enables students to learn the knowledge, skills and abilities to perform the application and software development workforce roles outlined in the NICE Cybersecurity Framework	This DxCERTS training and mentoring program enables students to learn the knowledge, skills and abilities to perform the project & program management workforce roles outlined in the NICE Cybersecurity Framework	This DxCERTS training and mentoring program enables students to learn the business skills necessary to communicate and work with the various lines of business within an enterprise
Pathway Roles	OTIF Engineer OTIF Operations Analyst OTIF Business Analyst OTIF Expert Practitioner	NISTCSF Engineer NISTCSF Operations Analyst NISTCSF Business Analyst NISTCSF Risk Management Analyst Cyber Resilience Engineer Cyber Resilience Operations Analyst Cyber Resilience Business Analyst	ITSM Engineer ITSM Operations Analyst ITSM Business Analyst ITSM Expert Practitioner ITSM AGILE Practitioner ITSM Governance Practitioner DEVOPS Practitioner	INFOSEC Engineer INFOSEC Operations Analyst INFOSEC Business Analyst INFOSEC Specialist Ethical Hacker, Pen Tester, Vulnerability Assessor, Forensics Investigator, First Responder, Wireless Network Professional, Auditor, Manager / Officer, Healthcare Professional, Secure Web Analyst, Disaster Recovery Analyst	Microsoft MCSA Microsoft MCSE Cisco CCNA Cisco CCIP VMware Professional CompTIA PC Specialist CompTIA Server Specialist CompTIA Network Specialist CompTIA Cloud Specialist CompTIA Linux Specialist CompTIA Healthcare Technician	Amazon Web Services Engineer Amazon Web Services Operations Analyst Microsoft Azure Engineer Microsoft Azure Operations Analyst	Software & Application Developer JavaScript Specialist, ASP.NET Specialist, Angular 5 Specialist, SCSS Specialist, C# Specialist, C++ Specialist, Python Specialist, Rust Specialist, RSP Specialist, Hadoop Specialist, PER Specialist, RESTful Specialist, BootStrap Specialist, Selenium Specialist	Project Management Professional SCRUM Professional AGILE Professional RISK Management Professional	Enterprise Business Skills Cybersecurity Awareness, Operating Systems, SharePoint, Internet & Core Computing, Legal, Web Design, Accounting, Social Media, Human Resources, Communication Skills, Time Management Skills, Thinking Critically, Business Etiquette, Customer Service
Certification Bodies	APMG International	APMG International Axele / Peoplecert	Axele / Peoplecert ISACA	CompTIA ISC2 ISACA MIL2	CompTIA Microsoft Cisco Vmware	Amazon Microsoft	Various	Project Management Institute (PMI) Axele SCRUMstudy	Various
Alignment with NICE Cybersecurity Workforce Categories	Oversee & Govern	Securely Provision Operate & Maintain Protect & Defend Oversee & Govern Collect & Operate Investigate Analyze	Securely Provision Operate & Maintain Protect & Defend Oversee & Govern Collect & Operate Investigate Analyze	Securely Provision Operate & Maintain Protect & Defend Oversee & Govern Collect & Operate Investigate Analyze	Securely Provision Operate & Maintain Protect & Defend	Securely Provision Operate & Maintain Protect & Defend	Securely Provision Operate & Maintain Protect & Defend	Oversee & Govern	Oversee & Govern

[Click here](#) to see or download our course catalog

[Click here](#) to learn more about our Curriculum Licensing & TTT programs.

[Click here](#) to read NICE Cybersecurity Workforce Framework Publication

## DxCERTS Curriculum Benefits

Listed below are the eight reasons your university, training company or enterprise learning and development organization should partner with itSM Solutions for its DxCERTS IT & NIST Cybersecurity career pathway curriculum subscription program.

- DxCERTS is the industry’s first online IT & NIST Cybersecurity career pathway training curriculum & student management platform designed specifically for K-12, higher education and enterprise learning & development organizations.
- DxCERTS career pathway programs are aligned with the industry leading IT & Cybersecurity frameworks being adopted and operationalized by organizations across the globe. These frameworks

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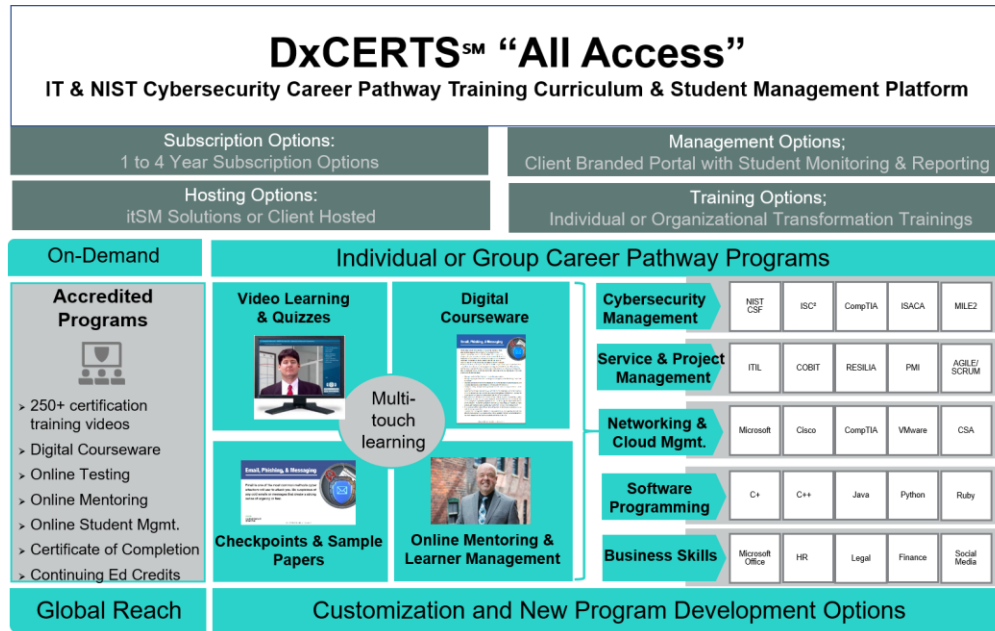
- include the NIST Cybersecurity Framework, NICE Cybersecurity Workforce Framework, ITIL, RESILIA, Cobit and the Digital Transformation Readiness Framework.
- DxCERTS subscription program provides enterprises of any size the ability to offer training to all of its IT & NIST Cybersecurity workforce. DxCERTS flexible delivery options enable the program to be adapted to any organizational structure and training schedule
  - DxCERTS online Student Monitoring, Mentoring & Reporting platform ensures a successful outcome for both the student and employer
  - DxCERTS online instructor Train-the Trainer program enables enterprises to quickly stand-up its own delivery and mentoring force.
  - DxCERTS multi-year licenses enable individuals and enterprises to span the training over degree program years or enterprise budget cycles
  - DxCERTS procure options include Credit Card, Purchase Order, HR Continuing Education Funds, and State or Federal Workforce Development or Grant Funds

### ***DxCERTS “All Access” Subscription Program***

The DxCERTS “All Access” subscription program enables individuals and organizations from across the globe to become trained and certified in the most sought-after positions in IT & Cybersecurity for one low annual fee.

A full listing and description of the programs listed below can be found [here](#).

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### DxCERTS INDIVIDUAL Subscription

The DxCERTS INDIVIDUAL subscription provides unlimited access to the complete DxCERTS online certification training library for 12, 24, 36 or 48 months. This affordable, easy to use, online training program enables students from across the globe to become trained and certified in the most sought-after positions in IT & NIST Cybersecurity without accumulating the massive expense normally associated with this volume of programs.

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### **DxCERTS ENTERPRISE Subscription**

The DxCERTS ENTERPRISE subscription provides unlimited access to the complete DxCERTS online certification training library and branded student management platform for 12, 24, 36 or 48 months.

This affordable, easy to use, online training program enables higher ed, enterprise and government institutions from across the globe to train and certify its students and workforce with the knowledge, skills and abilities to engineer, operate and continually improve an IT or NIST Cybersecurity program.

The “All Access” enterprise subscription program not only helps organizations get the right training to the right person at the right time but also equips management teams (Professors, HR, Learning & Development, Department Managers etc.) with the management and reporting platform necessary to ensure a successful, on-time, training/business outcome for both the student, academic institution or employer.

### ***NISTCSF.COM Curriculum Consortium Partners***

The following companies have come together to provide the operational infrastructure to support the NISTCSF.COM curriculum consortium.



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### **Reseller Partners**

NISTCSF.COM has partnered with academic and private institutions to deliver the NISTCSF.COM assessment and workforce development programs. Inaugural partners include New Horizons Computer Learning Centers, LRS Education Services, University of West Florida, Bryant University, GRC Sphere and Babbage Simmel.

### **Print and Digital Book Distribution**

NISTCSF.COM has partnered with Arvato Training & Education Services a global eCommerce platform an integrated eReader application which delivers print and digital book versions of the NISTCSF.COM curricula to students anywhere in the world. Arvato is currently the exclusive delivery partner for Microsoft training and consulting education solutions worldwide.

### **Platform Partners**

NISTCSF.COM has partnered with leading Assessment, Learning Management and Simulation platform companies to deliver affordable training solutions for today's cyber enterprise. Inaugural partners include Career Academy and CyberSaint.

### **Authoring Partners**

NISTCSF.COM's inaugural program NIST Cybersecurity Framework – Controls Factory Model™ (NCSF-CFM), was built in partnership with UMass Lowell (UML) a NSA/DHS National Center of Academic Excellence in

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Cyber Defense Research (CAE-R). NISTCSF.COM has since formed strategic partnerships with Axelos creator of the ITIL®, RESILIA® and PRINCE2 frameworks & methodologies, ISACA creator of the COBIT framework, The Institute for Digital Transformation creator of the Digital Enterprise Readiness Framework (DERF) and other academic and private industry partners to build out the rest of the NISTCSF.COM portfolio.

### **Publishing Partners**

NISTCSF.COM has partnered with itSM Solutions to create assessment, remediation, certification and simulation training solutions for today's cyber enterprise

### **Accreditation Partners**

NISTCSF.COM has partnered with APMG for content accreditation and exam delivery services.

### ***Summary***

Three things are certain: first, digital services are now at the center of most businesses; second, business is a moving target, third organizations are under attack from those trying to steal the information companies rely on for daily business operations and revenue.

The itSM Solutions DxCERTS training curriculum and student management system enables enterprises of any size to create a workforce capable of identifying, protecting, detecting, responding and recovering from cyber-attacks.

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### ***About itSM Solutions LLC***

itSM Solutions LLC is an accredited content publishing company specializing in the creation of assessment, certification and skills training content for Information Technology (IT) and NIST Cybersecurity professionals. itSM's training solutions have been adopted by the who's who of industry including HPE, Microsoft, Disney, Cisco, IRS, Navy, Lowes, Staples, Genzyme, Boeing, Intel, Molina Healthcare and many others.

itSM Solutions is also the founder of NISTCSF.COM a global consortium of academic, government and industry thought leaders working together to create Cybersecurity training programs that help organizations operationalize, maintain and improve the frameworks and methods created by the National Institute of Standards & Technologies (NIST), the National Institute of Cybersecurity Education (NICE) and other internationally recognized institutes and standards organizations. The consortium's goal is to provide academia and enterprises with an affordable and scalable way to train, skill and certify today's Cybersecurity workforce.

### ***About the Authors***

**David Nichols** is the President and CEO of itSM Solutions LLC, an ITSM consulting and training company. He has over 40 years experience in Information Technology. As an early adopter of the IT Service Management processes as described in the IT Infrastructure Library (ITIL), he has utilized his hardware and software engineering background as a foundation for implementing sweeping changes in how IT Services are delivered at several fortune 100 companies in the US. Working closely with the executive management teams, David has helped the strategic goals of the IT organization with those of the company and develop a more effective IT Strategy. Strategies that are customer focused, process-oriented and cost/performance optimized, and help business and IT organization establish the value of IT Services. David holds ITSM Service Manager certification.

**Rick Lemieux** is a managing partner and the Vice President of Business Development. He is responsible for overseeing the company's Sales, Marketing & Business Development programs. Rick has been involved in selling IT solutions for the past 30 years. Prior to itSM, Rick, an early proponent of ITSM and ITIL, led the Sales and Business Development teams at software companies focused on automating the best practices guidance outlined in ITIL. Rick holds a Foundation Certificate in IT Service Management and was recently identified as one of the top 5 IT Entrepreneurs in the State of Rhode Island by the TECH 10 awards.