

NCL CATEGORY ALIGNMENT

How NCL Cybersecurity Skill Categories Align to the NIST NICE Cybersecurity Work Roles and CompTIA Certifications

(Updated August 2021)

The National Cyber League (NCL), powered by Cyber Skyline, enables high school and college students across the U.S. to prepare and test themselves against practical cybersecurity challenges they will likely face in the workforce. The National Institute of Standards and Technology (NIST), through the National Initiative for Cybersecurity Education (NICE), has created a widely used Cybersecurity Workforce Framework to standardize cybersecurity competency areas and terminology.

NCL's partner, CompTIA, offers relevant certifications for the cybersecurity profession. The chart below shows alignment of the nine NCL Game categories to NIST NICE Cybersecurity Work Roles and CompTIA Certifications. Using this chart, cybersecurity recruiters are able to quickly match the hands-on knowledge and skills of NCL student players to cybersecurity job openings. NCL also aligns with the NSA Centers of Academic Excellence in Cyber Defense (CAE-CD) Knowledge Units.

KEY: The National Cyber League (NCL) Competition consists of nine skill categories shown below.



















Open Source Cryptography Intelligence	Password Log Analy Cracking	ysis Network Traffic Analysis	Forensics Web Application Exploitation		cation	Scanning		Enumeration and Exploitation			
NIST NICE CYBERSECURITY WORK ROLE	RELEVANT COMPTIA CERTIFICATIONS	NIST NICE CYBERSECURITY WORKFORCE CATEGORY			NCL	SKILI	L CA1	EGO	RIES		
THESE ARE THE JOBS	AS OF 8-21	NICE CATEGORY	ALI	GNIN	G TO	THESE	NCL	SKIL	L CAT	EGOF	RIES
All-Source Analyst	NA	Analyze	*		=		*	û			
COMSEC Manager	CASP+	Oversee and Govern	*			-	₩			··· >	
Cyber Crime Investigator	PenTest+	Investigate	*		<u>=</u>	-	₩	î			
Cyber Defense Analyst	PenTest+	Protect and Defend	*		<u>=</u>		*	î		···	
Cyber Defense Forensics Analyst	PenTest+, CySA+	Investigate	*			<u>-</u>	⊕	î			
Cyber Defense Incident Responder	Security+, PenTest+, Cloud+	Protect and Defend	*			<u>-</u>	₩				
Cyber Defense Infrastructure Support Specialist	A+, Network+, PenTest+, Cloud+	Protect and Defend	*		<u>=</u>	-	*	î		···	
Cyber Intel Planner	PenTest+, CySA+, CASP+	Operate and Collect	*		**						
Cyber Operations Planner	PenTest+, CySA+, CASP+	Operate and Collect	*		=		*	Û	⟨/⟩	Q	
Cyber Operator	PenTest+, CySA+, CASP+	Operate and Collect	*		=		⊕			<u>></u>	Q
Data Analyst	CASP+	Operate and Maintain	*			₩	(/)				
Database Administrator	Security+	Operate and Maintain	=		(/)						
Enterprise Architect	Cloud+	Securely Provision	*				>				
Exploitation Analyst	PenTest+, CySA+, CASP+	Analyze	*			<u></u>	**			~ />	

Investigate

Securely Provision

Oversee and Govern

PenTest+, CySA+

Security+

CASP+

Forensics Analyst

Information Systems

Security Developer

IT Program Auditor

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How NCL Skill Categories Align to the NIST NICE Cybersecurity Work Roles and Comp-**TIA Certifications (cont.)**

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Cryptography Intelligence Cracking

Analysis

Forensics **Application Exploitation**

and **Exploitation**

NIST NICE CYBERSECURITY WORK ROLE	RELEVANT COMPTIA CERTIFICATIONS	NIST NICE CYBERSECURITY WORKFORCE CATEGORY	NCL SKILL CATEGORIES
THESE ARE THE JOBS	AS OF 8-21	NICE CATEGORY	ALIGNING TO THESE NCL SKILL CATEGORIES
Language Analyst	NA	Analyze	● ■
Network Operations Specialist	Cloud+, Security+	Operate and Maintain	
Partner Integration Planner	PenTest+, CySA+, CASP+	Operate and Collect	● ■ ※
Privacy Compliance Manager	NA	Oversee and Govern	
Requirements Planner	CASP+	Securely Provision	
Research & Development Specialist	PenTest+	Securely Provision	※ 图 郑 時 圆 繪
Secure Software Assessor	Security+	Securely Provision	● 事 第
Security Architect	CASP+	Securely Provision	
Security Controls Assessor	Security+, PenTest+, CySA+	Securely Provision	❷ ■ 酉 ಱ
Software Developer	Security+	Securely Provision	
Systems Administrator	Cloud+	Operate and Maintain	❷ ■ 春 铵
Systems Developer	Security+	Securely Provision	
Systems Security Analyst	CySA+	Operate and Maintain	
Target Analyst	NA	Analyze	
Target Developer	NA	Analyze	
Technical Support Specialist	PenTest+, CySA+, CASP+	Operate and Maintain	● 春 毎
Testing and Evaluation Specialist	Network+, Security+, PenTest+, CySA+	Securely Provision	❷ 圖 筬
Vulnerability Analyst	PenTest+	Protect and Defend	