

SUBDOMAINS	FOCUS	KEY TECHNOLOGIES	SKILLS	APPLICATIONS	EXAMPLE COMPANIES
NETWORK SECURITY	Protecting network infrastructure	<ul style="list-style-type: none"> • Firewalls • Intrusion Detection Systems (IDS) • Intrusion Prevention Systems (IPS) • Virtual Private Networks (VPNs) 	<ul style="list-style-type: none"> • Network Protocols (TCP/IP, DNS, HTTP/S) • Firewall Configuration and Management • Intrusion Detection and Prevention • Network Segmentation 	<ul style="list-style-type: none"> • Securing network boundaries • Monitoring traffic • Preventing unauthorized access 	<ul style="list-style-type: none"> • Cisco • Palo Alto Networks • Fortinet
CLOUD SECURITY	Securing cloud-based assets and environments	<ul style="list-style-type: none"> • AWS • Azure • Google Cloud Platform (GCP) • Cloud Access Security Brokers (CASBs) 	<ul style="list-style-type: none"> • Cloud Infrastructure Security • Identity and Access Management (IAM) • Data Encryption and Key Management • Compliance and Governance 	<ul style="list-style-type: none"> • Protecting Cloud Data • Managing user access • Ensuring regulatory compliance 	<ul style="list-style-type: none"> • Amazon Web Services (AWS) • Microsoft Azure • Google Cloud
APPLICATION SECURITY	Securing applications during development and deployment	<ul style="list-style-type: none"> • Static Application Security Testing (SAST) • Dynamic Application Security Testing (DAST) • Web Application Firewalls (WAF) 	<ul style="list-style-type: none"> • Secure Coding Practices • Application Vulnerability Assessment • Penetration Testing • DevSecOps Integration 	<ul style="list-style-type: none"> • Building secure applications • Detecting and fixing vulnerabilities 	<ul style="list-style-type: none"> • Veracode • Checkmarx • Synopsys
ENDPOINT SECURITY	Protecting end-user devices	<ul style="list-style-type: none"> • Endpoint Detection and Response (EDR) • Antivirus • Anti-malware 	<ul style="list-style-type: none"> • Endpoint Protection Platforms (EPP) • Malware Analysis • Incident Response • Patch Management 	<ul style="list-style-type: none"> • Securing laptops, desktops, and mobile devices 	<ul style="list-style-type: none"> • Symantec • McAfee • CrowdStrike
IDENTITY AND ACCESS MANAGEMENT (IAM)	Managing user identities and access privileges	<ul style="list-style-type: none"> • Single Sign-On (SSO) • Multi-Factor Authentication (MFA) • Identity Governance and Administration (IGA) 	<ul style="list-style-type: none"> • User Provisioning and De-provisioning • Role-Based Access Control (RBAC) • Authentication and Authorization Protocols • Identity Federation or Federated Identity Management (FIM) 	<ul style="list-style-type: none"> • Controlling user access, preventing unauthorized access 	<ul style="list-style-type: none"> • Okta • IBM • RSA
THREAT INTELLIGENCE AND INCIDENT RESPONSE	Detecting, analyzing, and responding to cyber threats	<ul style="list-style-type: none"> • Security Information and Event Management (SIEM) • Threat Intelligence Platforms (TIPs) 	<ul style="list-style-type: none"> • Threat Hunting • Digital Forensics • Incident Management • Malware Analysis 	<ul style="list-style-type: none"> • Proactive threat detection • Mitigating attacks 	<ul style="list-style-type: none"> • FireEye • Mandiant • Splunk
GOVERNANCE, RISK, AND COMPLIANCE (GRC)	Ensuring adherence to regulatory and security requirements	<ul style="list-style-type: none"> • GRC Platforms • Compliance Management Tools 	<ul style="list-style-type: none"> • Risk Assessment and Management • Regulatory Compliance (GDPR, HIPAA) • Policy Development and Enforcement • Audit Management 	<ul style="list-style-type: none"> • Managing risk • Ensuring compliance • Conducting audits 	<ul style="list-style-type: none"> • RSA Archer • MetricStream • ServiceNow
CRYPTOGRAPHY	Securing data through encryption	<ul style="list-style-type: none"> • Public Key Infrastructure (PKI) • Secure Socket Layer (SSL) • Transport Layer Security (TLS) 	<ul style="list-style-type: none"> • Encryption Algorithms (AES, RSA) • Key Management • Digital Signatures • Cryptographic Protocols 	<ul style="list-style-type: none"> • Protecting data integrity and confidentiality 	<ul style="list-style-type: none"> • Thales • DigiCert • Entrust