

CCISO

Blueprint v4



Domains	Sub Domain	Description	Number of Questions	Weightage
1. Governance, Risk, Compliance, and Audit Management	Governance	<ul style="list-style-type: none"> Define, implement, manage and maintain an information security governance program that includes leadership, organizational structures, and processes. Align information security governance framework with organizational goals and governance, i.e., leadership style, philosophy, values, standards, and policies. Establish information security management structure. Establish a framework for information security governance monitoring (considering cost/benefits analyses of controls and ROI). Understand standards, procedures, directives, policies, regulations, and legal issues that affect the information security program. Understand the enterprise information security compliance program and manage the compliance team. Understand the role of the governing board and the CISO's role in supporting the board Understand the legal and jurisdictional implications in a cloud computing model and the responsibilities of the organization in establishing appropriate policies and procedures. 	9	21%
	Risk Management	<ul style="list-style-type: none"> Create a risk management program policy and charter Create a risk assessment methodology and framework Create and manage risk register Create risk assessment schedule and check lists Create risk reporting metrics and processes Understand and describe the cloud computing models, private, public, and hybrid, and identify the risks, benefits, and security considerations of each. Understand and identify the risks associated with artificial intelligence such as bias, inaccuracies, model transparency, data security, and model vulnerabilities. 	9	
	Compliance	<ul style="list-style-type: none"> Analyze and understand common external laws, regulations, standards, best practices applicable to the organization, and organizational ethics. Be familiar with international security and risk standards such as ISO 27000, and 31000 series Implement and manage information security strategies, plans, policies, and procedures to reduce regulatory risk Understand the importance of regulatory information security organizations and appropriate industry groups and Stakeholders Understand information security changes, trends, and best practices Understand and manage enterprise compliance program controls, information security compliance 	9	

		<p>process and procedures, compliance auditing, and certification programs</p> <ul style="list-style-type: none"> • Understand the information security compliance process and procedures • Compile, analyze, and report compliance programs • Understand the compliance auditing and cortication programs • Follow organizational ethics 		
	IT Audit Management	<ul style="list-style-type: none"> • Understand the IT audit process and be familiar with IT audit standards • Apply information systems audit principles, skills, and techniques in reviewing and testing information systems technology and applications to design and implement a thorough risk-based IT audit strategy • Execute the audit process in accordance with established standards and interpret results against defined criteria to ensure that the information systems are protected, controlled, and effective in supporting organization's objectives • Evaluate audit results, weighing the relevancy, accuracy, and perspective of conclusions against the accumulated audit evidence • Assess the exposures resulting from ineffective or missing control practices and formulate a practical and cost-effective plan to improve those areas • Develop an IT audit documentation process and share reports with relevant stakeholders as the basis for decision-making • Ensure that the necessary changes based on the audit findings are effectively implemented in a timely manner 	5	
2. Organizational Executive Leadership	Role of Leader	<ul style="list-style-type: none"> • Why Leadership Matters • Role of Leader in Organizational Success • Role of Leader in Information Security • Leadership with Power, Persuasion, and Influence • Leadership Types, Styles, and Theories • Leadership Environments 	8	21%
	Leading Organization	<ul style="list-style-type: none"> • Board Briefing • Funding Request Justification and ROI Promotion • Leading at Scale and Scope • Organizational Change Leadership • Organizational Contextual Intelligence and Analysis • Shifting from Analysis to Action for Organizational Change • Communicating Change • Shaping Organization for Competitive Advantage • Leading through Education and Awareness and Guarding from Misinformation • Bridging Stakeholders and Stockholders • Managing Up and Managing Expectations • Managing Down and Supporting • Managing Laterally with Collaboration • Assuring and Alerting Regulators and Examiners • Industry Specific Challenges in Leading Organizations 	8	

		<ul style="list-style-type: none"> • Predicting Future through Data Analysis • Leading Innovative and Risky Projects 		
	Leading People, Building Teams, and Mentoring Future Leaders	<ul style="list-style-type: none"> • Hiring Future Leaders and Talent • Succession Planning • Delegation • Branding Security group (Your Team) • Leading Virtual Teams • Team Building, Consensus Building, and Building Commitment • Inclusive Leadership • Performance Evaluation Reviews and Feedback • Managing Difficult Conversations • Leading During Crisis and Disasters • Building Loyalty and Retention • Motivating Teams for Common Goals • Role Modeling Ethical Leadership • Lead with empathy • Mentoring and Coaching Teams 	8	
	Leading Self	<ul style="list-style-type: none"> • Executive Presence • Emotional Intelligence • Social and Cultural Intelligence • Understanding Others • Building Leadership Networks • Leading with Contextual Communication • Leading with Persuasive Business Communication • Asking for Feedback • Courage of Your Convictions • Resilience During Uncertain Environment • Adaptability, Resilience, and Agility • Using Time and Priorities Decisions • Negotiation, Mediation, and Alternative Conflict Resolution • Leading with Problem Solving • Quantitative Rational Decision Making • Behavioral decision making • Personal Development Planning • Readiness to Set into New Leadership Roles 	8	
3. Information Security Controls, Security Program Management & Operations	Information Security Management Controls	<ul style="list-style-type: none"> • Identify the organization’s operational process and objectives • Design information systems controls in alignment with the operational needs and goals and conduct testing prior to implementation to ensure effectiveness • Identify and select the resources required to effectively implement and maintain information systems controls. Such resources can include human capital, information, infrastructure, and architecture (e.g., platforms, operating systems, networks, databases, applications) • Design and implement information systems controls to mitigate risk. Monitor and document the information systems control performance in meeting organizational objectives by identifying and measuring metrics and key performance indicators 	10	20%

		<ul style="list-style-type: none"> • Design and conduct testing of information security controls to ensure effectiveness, discover deficiencies, and ensure alignment with the organization’s risk management program • Design and implement processes to appropriately remediate deficiencies and evaluate problem management practices to ensure that errors are recorded, analyzed, • and resolved in a timely manner • Understand the Shared Responsibility Model of cloud computing and determine areas where the CISO owns security in each of the IaaS, PaaS, and SaaS 		
	Security Program Management	<ul style="list-style-type: none"> • For each information systems project develop a clear project scope statement in alignment with organizational objectives • Define activities needed to successfully execute the information systems program, estimate activity duration, and develop a schedule and staffing plan • Develop, manage and monitor the information systems program budget, estimate and control costs of individual projects • Identify, negotiate, acquire and manage the resources needed for successful design and implementation of the information systems program (e.g., people, infrastructure, and architecture) • Acquire, develop and manage information security project team • Assign clear information security personnel job functions and provide continuous training to ensure effective performance and accountability • Direct information security personnel and establish communications, and team activities, between the information systems team and other security-related personnel (e.g., technical support, incident management, security engineering) 	10	
	Security Program Operations	<ul style="list-style-type: none"> • Resolve personnel and teamwork issues within time, cost, and quality constraints • Identify, negotiate and manage vendor agreement and community • Participate with vendors and stakeholders to review/assess recommended solutions; identify incompatibilities, challenges, or issues with proposed solutions • Evaluate the project management practices and controls to determine whether business requirements are achieved in a cost-effective manner while managing risks to the organization • Develop a plan to continuously measure the effectiveness of the information systems projects to ensure optimal system performance • Identify stakeholders, manage stakeholders’ expectations, and communicate effectively to report progress and performance 	10	

		<ul style="list-style-type: none"> • Ensure that necessary changes and improvements to the information systems processes are implemented as required 		
4. Information Security Core Competencies	Access Control	<ul style="list-style-type: none"> • Identify the criteria for mandatory and discretionary access control, understand the different factors that help in implementation of access controls and design an access control plan • Implement and manage an access control plan in alignment with the basic principles that govern the access control systems such as need-to-know • Identify different access control systems such as ID cards and biometrics, along with the importance of multi-factor authentication for all applicable environments. • Understand the importance of warning banners for implementing access rules 	2	19%
	Social Engineering, Phishing Attacks, Identity Theft	<ul style="list-style-type: none"> • Understand various social engineering concepts, emerging trends, and their role in insider attacks and develop best practices to counter social engineering attacks • AI powered Social Engineering, understand the context of IoT and Smart Devices, Deepfake technology • Design a response plan to identity theft incidences • Understanding and protecting against Social Engineering in the age of Social Media 	2	
	Physical Security	<ul style="list-style-type: none"> • Identify standards, procedures, directives, policies, regulations, and laws for physical security • Determine the value of physical assets and the impact if unavailable • Design, implement and manage a comprehensive, coordinated, and holistic physical security plan to ensure overall organizational security including an audit schedule and performance metrics 	2	
	Disaster Recovery and Business Continuity Planning	<ul style="list-style-type: none"> • Develop, implement, and monitor business continuity, business recovery, contingency planning, and disaster recovery plans in case of disruptive events and ensure alignment with organizational goals and objectives • Direct contingency planning, operations, and programs to manage risk • Design documentation process as part of the continuity of operations program • Design and execute a testing and updating plan for the continuity of operations program • Understand the importance of integration of IA requirements into the Continuity of Operations Plan (COOP). • Design Backup and disaster recovery strategies for cloud computing 	2	
	Firewall, IDS/IPS and Network Defense Systems	<ul style="list-style-type: none"> • Understand and manage network cloud security • Identify the appropriate intrusion detection and prevention systems for organizational information security • Design and develop a program to monitor firewalls and identify firewall configuration issues 	3	

		<ul style="list-style-type: none"> • Understand perimeter defense systems such as grid sensors and access control lists on routers, firewalls, and other network devices • Identify the basic network architecture, models, protocols and components such as routers and hubs that play a role in network security • Understand the concept of network segmentation 		
	Wireless Security	<ul style="list-style-type: none"> • Identify vulnerability and attacks associated with wireless networks and manage different wireless network security tools 	2	
	Virus, Trojans and Malware, and other Malicious Code Threats	<ul style="list-style-type: none"> • Assess the threat of virus, Trojan and malware to organizational security and identify sources and mediums of malware infection both security teams and non-security teams on secure development processes 	2	
	Secure Coding Best Practices and Securing Web Applications	<ul style="list-style-type: none"> • Develop and maintain software assurance programs in alignment with the secure coding principles and each phase of System Development Life Cycle (SDLC) • Understand various system-engineering practices • Configure and run tools that help in developing secure programs • Understand software vulnerability analysis techniques including static code, dynamic code, and software composition analysis. • Install and operate the IT systems in a test configuration manner that does not alter the program code or compromise security safeguards • Identify web application vulnerabilities and attacks and web application security tools to counter attacks 	2	
	OS Hardening	<ul style="list-style-type: none"> • Identify various OS vulnerabilities and attacks and develop a plan for hardening OS systems • Understand system logs, patch management process and configuration management for information system security 	2	
	Encryption Technologies	<ul style="list-style-type: none"> • Understand the concept of encryption and decryption, digital certificates, public key infrastructure and the key differences between cryptography and steganography • Identify the different components of a cryptosystem • Develop a plan for information security encryption techniques 	2	
	Vulnerability Assessment and Penetration Testing	<ul style="list-style-type: none"> • Design, develop and implement a penetration testing program based on penetration testing methodology to ensure organizational security • Identify different vulnerabilities associated with information systems and legal issues involved in penetration testing • Develop pre and post testing procedures • Develop a plan for pen test reporting and implementation of technical vulnerability corrections • Develop vulnerability management systems 	3	
	Threat Management	<ul style="list-style-type: none"> • Create and manage a threat management program including threat intelligence, third-party threats, and 	2	

		<p>security bulletins regarding hardware and software, particularly open-source software</p> <ul style="list-style-type: none"> • Threat modeling principles, methodologies, • Techniques and simulations 		
	Incident Response and Computer Forensics	<ul style="list-style-type: none"> • Develop a plan to identify a potential security violation and take appropriate action to report the incident • Comply with system termination procedures and incident reporting requirements related to potential security incidents or actual breaches • Assess potential security violations to determine if the network security policies have been breached, assess the impact, and preserve evidence • Diagnose and resolve IA problems in response to reported incidents • Design incident response procedures including testing, tabletop exercises, and playbooks • Develop guidelines to determine whether a security incident is indicative of a violation of law that requires special legal action • Identify the volatile and persistent system information • Set up and manage forensic labs and programs • Understand various digital media devices, e-discovery principles and practices and different file systems • Develop and manage an organizational digital forensic program • Establish, develop and manage forensic investigation teams • Design investigation processes such as evidence collection, imaging, data acquisition, and analysis • Identify the best practices to acquire, store and process digital evidence • Configure and use various forensic investigation tools • Design anti-forensic techniques 	2	
5. Strategic Planning, Finance, Procurement, and Third-Party Management	Strategic Planning	<ul style="list-style-type: none"> • Design, develop and maintain enterprise information security architecture (EISA) by aligning business processes, IT software and hardware, local and wide area networks, people, operations, and projects with the organization's overall security strategy • Perform external analysis of the organization (e.g., analysis of customers, competitors, markets and industry environment) and internal analysis (risk management, organizational capabilities, performance measurement etc.) and utilize them to align information security program with organization's objectives • Identify and consult with key stakeholders to ensure understanding of organization's objectives • Define a forward-looking, visionary and innovative strategic plan for the role of the information security program with clear goals, objectives and targets that support the operational needs of the organization 	10	19%

		<ul style="list-style-type: none"> • Define key performance indicators and measure effectiveness on continuous basis • Assess and adjust security resources to ensure they support the organization's strategic objectives • Monitor and update activities to ensure accountability and progress 		
	Finance	<ul style="list-style-type: none"> • Analyze, forecast and develop the operational budget of the security department • Acquire and manage the necessary resources for implementation and management of information security plan • Allocate financial resources to projects, processes and units within information security program • Monitor and oversee cost management of information security projects, return on investment (ROI) of key purchases related to IT infrastructure and security and ensure alignment with the strategic plan • Identify and report financial metrics to stakeholders • Balance the IT security investment portfolio based on EISA considerations and enterprise security priorities • Understand the acquisition life cycle and determine the importance of procurement by performing Business Impact Analysis • Identify different procurement strategies and understand the importance of cost-benefit analysis during procurement of an information system • Understand the basic procurement concepts such as Statement of Objectives (SOO), Statement of Work (SOW), and Total Cost of Ownership (TCO) • Collaborate with various stakeholders (which may include internal client, lawyers, IT security professionals, privacy professionals, security engineers, suppliers, and others) on the procurement of IT security products and services • Include risk-based security requirements in acquisition plans, cost estimates, statements of work, contracts, and evaluation factors for award, service level agreements, and other pertinent procurement documents • Design vendor selection process and management policy • Develop contract administration policies that direct the evaluation and acceptance of delivered IT security products and services under a contract, as well as the security evaluation of IT and software being procured • Develop measures and reporting standards to measure and report on key objectives in procurements aligned with IT security policies and procedures • Understand the IA security requirements to be included in statements of work and other appropriate procurement documents 	9	

		<ul style="list-style-type: none"> • Understand the cost implications of cloud computing and design controls to monitor spending and maintain budgets 		
	Third Party Management	<ul style="list-style-type: none"> • Design third party selection process • Design third party management policy, metrics, and processes • Design and manage the third-party assessment process including ongoing compliance management • Develop measures and reporting standards to measure and report on key objectives in procurements aligned with IT security policies and procedures • Include risk-based security requirements in acquisition plans, cost estimates, statements of work, contracts, and evaluation factors for award, service level agreements, and other pertinent procurement documents • Understand the security, privacy, and compliance requirements to be included in Statements of Work (SOW), Master Service Agreements (MSA), and other appropriate • procurement documents 	9	