



MODULE 1



Governance, Risk & Compliance (GRC) Analyst Bootcamp

From Beginner to Job-Ready

Module 1: Introduction to Cybersecurity & GRC

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SECTION

Cybersecurity Foundations

Understanding the threat landscape and core domains

01

What is Cybersecurity?

Cybersecurity is the practice of protecting systems, networks, and programs from digital attacks. These cyberattacks usually aim to access, change, or destroy sensitive information; extort money from users; or interrupt normal business processes.

- Protects Confidentiality, Integrity, and Availability (CIA Triad)
- Defends against unauthorized access, data breaches, and cyber threats
- Encompasses technologies, processes, and people
- Critical in our increasingly digital world



The CIA Triad is the foundation of all cybersecurity programs and frameworks.



Confidentiality



Integrity



Availability

The Cyber Threat Landscape



Malware

Malicious software including viruses, ransomware, spyware designed to damage or exploit systems.



Phishing

Deceptive emails or messages that trick users into revealing sensitive information.



Ransomware

Attacks that encrypt data and demand payment for decryption, costing billions annually.



Social Engineering

Manipulating people into breaking security procedures through psychological tactics.



DDoS Attacks

Overwhelming systems with traffic to disrupt services and cause downtime.



Insider Threats

Security risks from employees, contractors, or partners with inside access.

Core Cybersecurity Domains



Network Security

Protecting network infrastructure and traffic



Application Security

Securing software from vulnerabilities



Cloud Security

Protecting data and services in the cloud



Identity & Access

Managing identities and controlling access



Endpoint Security

Protecting laptops, phones, and servers



Data Security

Ensuring data confidentiality and privacy



Incident Response

Detecting and responding to incidents



Security Architecture

Designing secure systems and frameworks

Technical Roles vs. GRC Roles



Technical Security Roles

- Security Analyst
- Penetration Tester
- SOC Engineer
- Incident Responder
- Cloud Security Architect



Focus: Hands-on defense, detection, and response



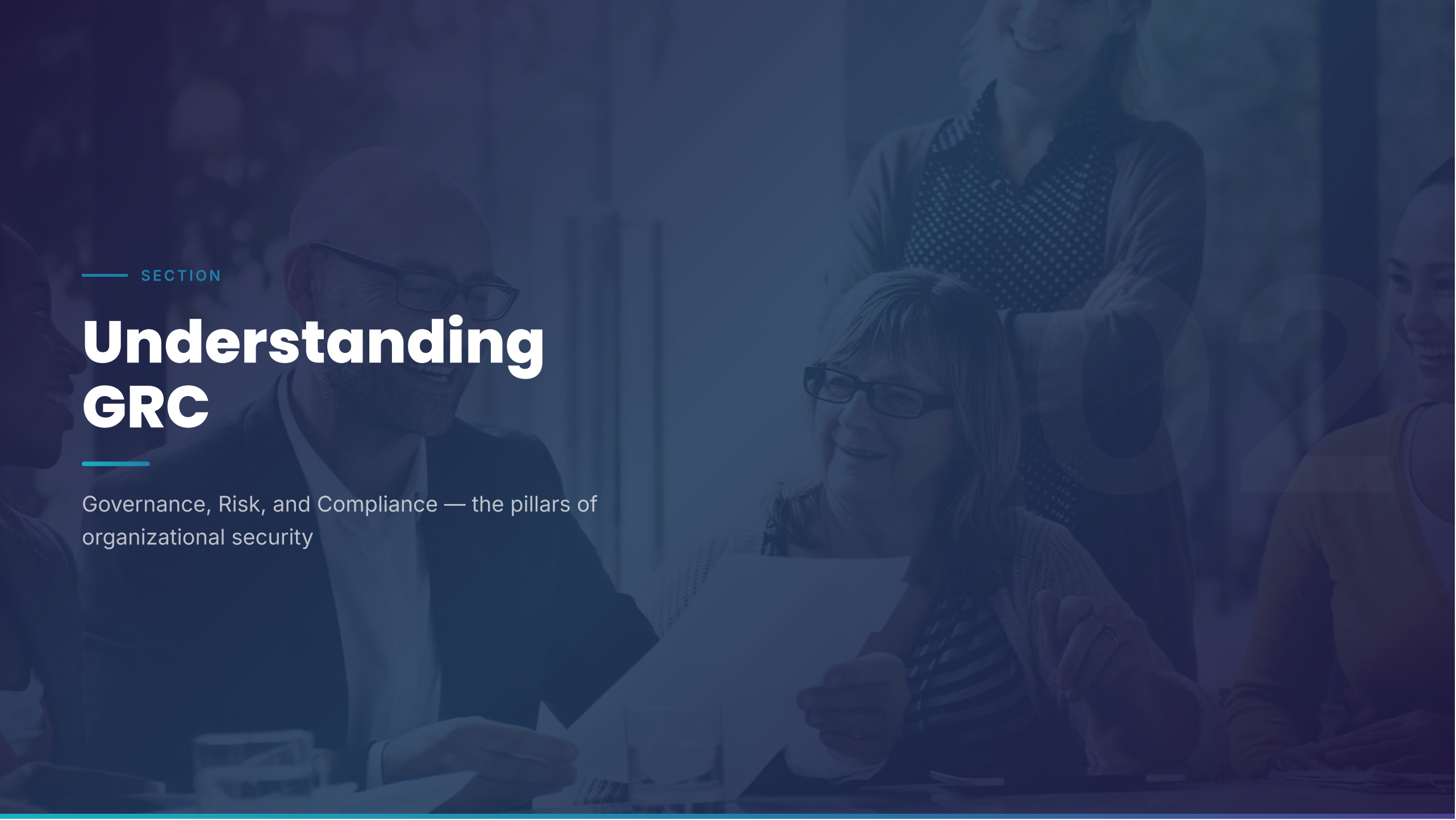
GRC Roles

- GRC Analyst
- Compliance Officer
- Risk Manager
- IT Auditor
- Policy Analyst



Focus: Governance frameworks, risk assessment, and regulatory compliance

Both career paths are essential — **GRC ensures the strategy, Technical implements the defense.**



SECTION

Understanding GRC

Governance, Risk, and Compliance — the pillars of
organizational security



What is Governance?

Governance is the system of rules, practices, and processes by which an organization is directed and controlled. In cybersecurity, governance ensures that security strategies align with business objectives.

- Establishes accountability and decision-making authority
- Defines roles, responsibilities, and policies
- Ensures alignment between IT security and business goals
- Provides oversight for risk management and compliance
- Drives organizational culture around security

GRC HIERARCHY

G

Governance

R

Risk

C

Compliance

💡 Governance sits at the top, setting strategy that guides risk and compliance activities.

Key Governance Frameworks



NIST CSF

National Institute of Standards and Technology
Cybersecurity Framework: Identify, Protect,
Detect, Respond, Recover.



COBIT

Control Objectives for Information and Related
Technologies for IT governance.



ISO 27001

International standard for information security
management systems.



COSO

Committee of Sponsoring Organizations
framework for internal controls.



ITIL

IT Service Management best practices
framework.



CMMC

Cybersecurity Maturity Model Certification for
defense contractors.



Organizations often adopt multiple frameworks based on industry requirements and regulatory needs.



What is Risk?

Risk is the potential for loss, damage, or harm when a threat exploits a vulnerability.
Risk management identifies, assesses, and prioritizes risks to minimize their impact.

$$\text{Risk} = \text{Threat} \times \text{Vulnerability} \times \text{Impact}$$

- Risk is inherent in every business operation
- Not all risks can be eliminated — they must be managed
- Risk appetite defines the level of risk an organization accepts
- Effective risk management enables informed decision-making

Risk Assessment Matrix Presentation Template

VERY LIKELY	LOW	MODERATE	HIGH	VERY HIGH	VERY HIGH
LIKELY	VERY LOW	LOW	MODERATE	HIGH	VERY HIGH
POSSIBLE	VERY LOW	LOW	MODERATE	HIGH	HIGH
UNLIKELY	VERY LOW	LOW	LOW	MODERATE	HIGH
VERY UNLIKELY	VERY LOW	VERY LOW	LOW	MODERATE	MODERATE
SIGNIFICANCE					
NEGLECTIBLE MINOR MODERATE SIGNIFICANT SEVERE					

i Risk matrices help organizations visualize and prioritize threats based on likelihood and impact.

The Risk Management Process



This is a continuous lifecycle — risk management never ends. Regular reassessment ensures the organization stays ahead of evolving threats.



What is Compliance?

Compliance is the act of conforming to laws, regulations, standards, and internal policies that govern how organizations handle data, protect privacy, and maintain security.

- Ensures organizations meet legal and regulatory requirements
- Protects organizations from penalties, fines, and legal action
- Builds trust with customers, partners, and stakeholders
- Requires continuous monitoring, auditing, and documentation
- Non-compliance can result in reputational damage and financial loss

COMPLIANCE BRIDGE



Governance

Strategy & Policy

Compliance



Operations

Execution & Controls

💡 Compliance bridges governance strategy with day-to-day operations, ensuring policies are actually implemented.



Major Compliance Standards & Regulations



GDPR

EU / GLOBAL

General Data Protection Regulation: EU data privacy law with global impact, fines up to 4% of annual revenue.



HIPAA

UNITED STATES

Health Insurance Portability and Accountability Act: Protects patient health information in the US.



PCI DSS

GLOBAL

Payment Card Industry Data Security Standard: Secures credit card data processing.



SOX

UNITED STATES

Sarbanes-Oxley Act: Financial reporting and corporate governance for public companies.



SOC 2

UNITED STATES

Service Organization Control 2: Security, availability, and privacy controls for service providers.



ISO 27001

INTERNATIONAL

International information security management standard.



GRC analysts must understand which regulations apply to their industry and ensure ongoing compliance through audits and controls.

GRC in Practice

Why organizations need GRC and how it drives business value



Value



Growth



Trust



Protection

Why Organizations Need GRC

GRC is not optional — it is a business necessity.

01 Regulatory Pressure

Increasing laws and regulations require formal compliance programs.

02 Cyber Threats

Growing attack surface demands structured risk management.

03 Business Reputation

A single breach can destroy years of trust and brand value.

04 Financial Protection

Non-compliance fines can reach billions; GRC prevents costly violations.

05 Stakeholder Trust

Investors, customers, and partners demand security assurance.

06 Operational Efficiency

Integrated GRC reduces duplication and streamlines security operations.

The Benefits of Integrated GRC

⊗ Without GRC

- ✗ Siloed departments
- ✗ Reactive approach
- ✗ Inconsistent policies
- ✗ Missed compliance deadlines
- ✗ Higher costs from duplication
- ✗ Unmanaged risk exposure

⚙️ With Integrated GRC

- ✓ Unified strategy and oversight
- ✓ Proactive risk management
- ✓ Standardized policies across the organization
- ✓ Automated compliance tracking
- ✓ Reduced costs through efficiency
- ✓ Clear risk visibility and reporting

Common GRC Implementation Challenges



Budget Constraints

Limited resources allocated to GRC programs and tools.



Complex Regulations

Navigating overlapping and evolving regulatory requirements.



Culture Resistance

Employees resisting new policies and compliance procedures.



Tool Overload

Too many disconnected GRC tools creating data silos.



Skills Gap

Shortage of qualified GRC professionals in the market.

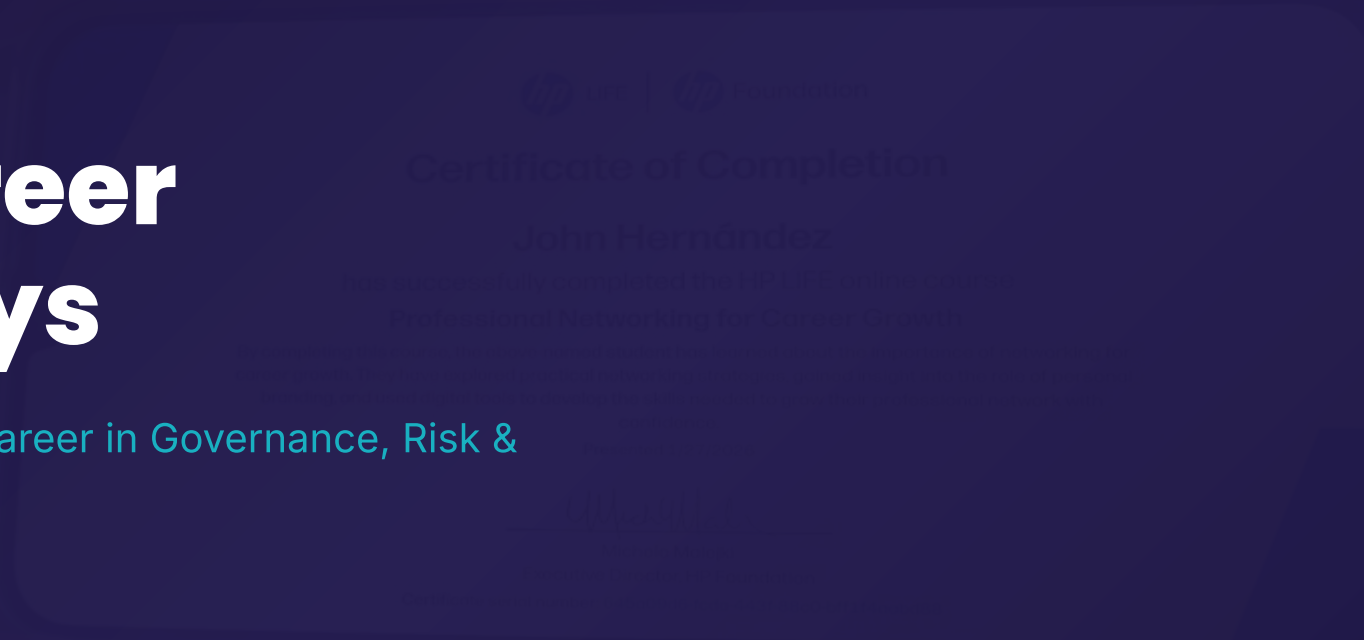


Measuring ROI

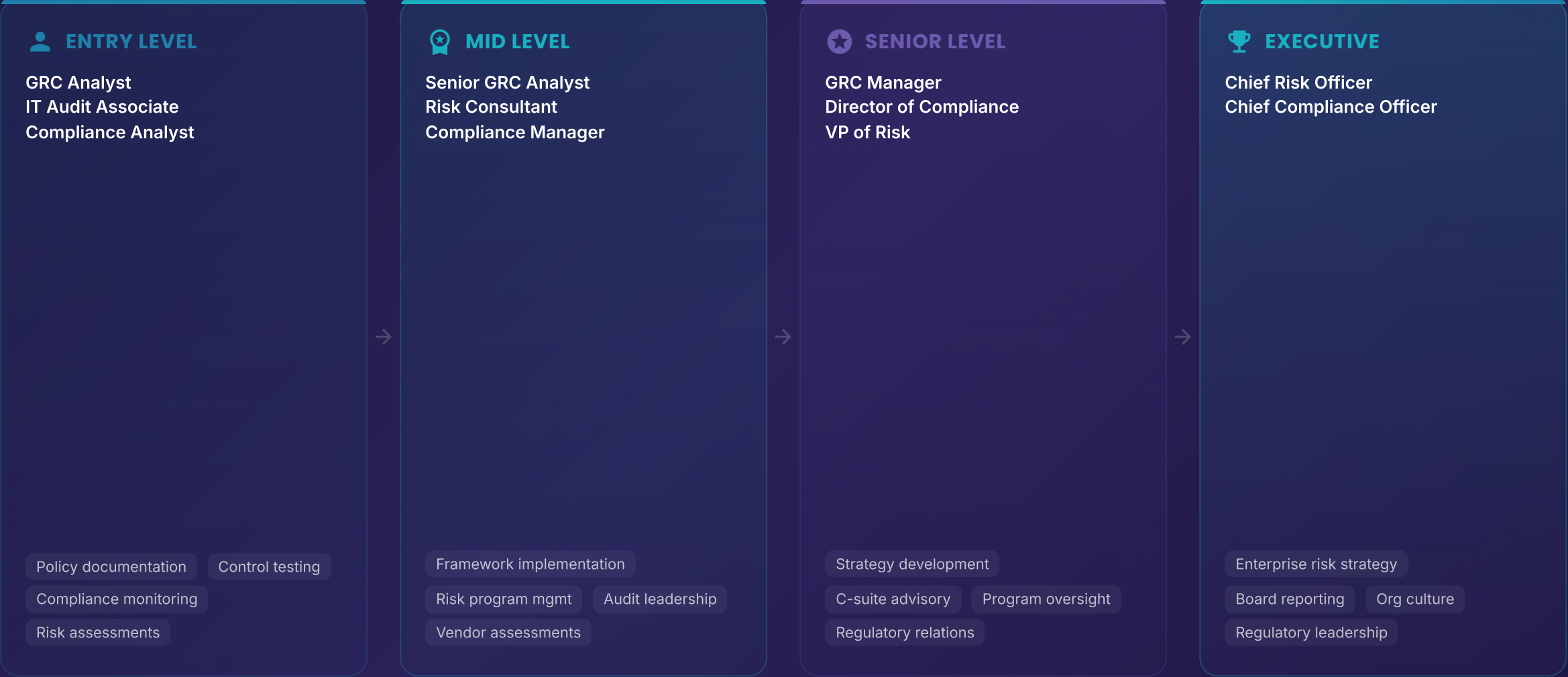
Difficulty demonstrating the value and return on GRC investments.

GRC Career Pathways

Building a successful career in Governance, Risk & Compliance



GRC Career Progression



Top GRC Certifications



CRISC

by ISACA

Focus: Risk management and information systems control



CISM

by ISACA

Focus: Security governance and program management



CISA

by ISACA

Focus: IT audit, control, and assurance



CISSP

by (ISC)²

Focus: Broad cybersecurity knowledge and architecture



CGRC

by ISC2

Focus: GRC principles and practices



ISO 27001 LA

Lead Auditor

Focus: Information security management system auditing

Building Your GRC Career — Action Plan

1



Build Foundation

Learn core concepts of IT, security, business, and regulations.

2



Get Certified

Start with CompTIA Security+, then pursue CRISC, CISM, or CISSP.

3



Gain Experience

Seek internships, junior GRC roles, or volunteer for audit projects.

4



Network

Join ISACA, (ISC)², and local cybersecurity communities.

5



Stay Current

Follow regulatory changes, emerging threats, and industry trends.

6



Specialize

Choose a focus: privacy, cloud security, financial services, or healthcare.

Module 1 — Key Takeaways

- 1 Cybersecurity protects systems, networks, and data from digital threats through the CIA Triad.
- 2 The cybersecurity landscape includes 8 core domains from network security to incident response.
- 3 GRC roles focus on strategy, policy, and oversight — complementing technical security roles.
- 4 Governance establishes the framework for organizational decision-making and accountability.
- 5 Risk management is a continuous process of identifying, assessing, mitigating, and monitoring risks.
- 6 Compliance ensures adherence to laws like GDPR, HIPAA, PCI DSS, and SOX.

✓ MODULE 1 COMPLETE



Thank You

Module 1 Complete — You Are One Step Closer to Being Job-Ready

→ Up Next: Module 2 — Information Security Fundamentals