



# Cyber Intelligence & Strategy Short Course

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CENTURION, GAUTENG

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Security Institute for Governance & Leadership in Africa  
**Stellenbosch University**



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# Cyber Intelligence & Strategy Short Course

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Security Institute for Governance & Leadership in Africa

## Stellenbosch University

Presented by SIGLA, Stellenbosch University, this course is designed to create awareness and build competencies and practical skills within the Cyber Intelligence domain. Topics include

- the Cyber Security environment
- attack methods
- finding information in the open and closed domain relative to an established profile
- effectively selecting and utilizing data gathering and analysis techniques and tools to provide intelligence to upper analysis and operational levels
- Cyber Criminology (especially threat actors active in different economic domains)
- Compiling an intelligence strategy to provide proactive solutions to cyber threats.

The target audience includes cyber analysts, managers within the cyber space, board members and persons active within a cyber program.

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## Presenters

**Prof Elmarie Biermann, Director Cyber Security Institute**

Extraordinary Professor, Dept of Strategic Studies, Stellenbosch University

About the Cyber Security Institute. [www.cybersecurityinstitute.co.za](http://www.cybersecurityinstitute.co.za)

**Noëlle Cowling, Dept Strategic Studies, Stellenbosch University**

Lead SIGLA Cyber <http://www.sun.ac.za/english/faculty/milscience/sigla>

# Stellenbosch University

## Scope

The evolution of threats and exploits within the Cyber domain compels organizations and governments to move from a reactive to a proactive environment in a quest to tamp attacks on data and services. Proactive solutions rely on actionable intelligence regarding threat actors, threat vectors and toolkits utilized to provide value within every step of the cyber kill chain. Intelligence encompasses not only threat profiling and understanding attacker behaviours and toolsets but also the processes followed together with the criminology aspect. This in turn then assists in identifying indicators of compromise, allowing managers and practitioners to make informed decisions. Ultimately an understanding of the threat profile and how threat actors access and move around inside networks leads to better threat hunting.

## Objective

The purpose of the course is to create awareness and build competencies and practical skills within the Cyber Intelligence domain.

## Course Outcomes

Understand the Cyber Security environment and identify attack methods.

Source information in the open and closed domains relative to an established profile.

Effectively choose and utilize data gathering and analysis techniques and tools to provide intelligence to upper analysis and operational levels.

Study cyber criminology, especially threat actors active in different economic domains.

Be able to effectively apply intelligence at every step of the attack process.

Compile an intelligence strategy to provide proactive solutions to cyber threats.

# Stellenbosch University Short Course Certificate

Certificates of competence to be issued on successful completion of the course. Successful completion requires continuous attendance and a minimum achieved mark of at least 70%.

## Course Outline

### Day 1: Cyber Security Environment

- Cyber Landscape
- Cyber threats and exploits
- Cyber Actors & Criminology aspects
- Attack methods & tools ☐ Criminal networks (Structure, Crime as a service, etc.)

### Day 2: Obtaining Data

- Source of Data
- Collection operations
- Applications, Tools and Services
- Sensors (IoT)
- Big Data
- Scraping Information

### Day 3: Analysis

- Analysis of cybercriminals' modus operandi
- Analysis Techniques (Data to Information)
- Indicators of Compromise
- Tactics, Techniques and Procedures ☐ Cyber kill chain and CCVs
- Tools & Services

### Day 4: Cyber Intelligence

- Cyber Intelligence Lifecycle & Practices
- Types of intelligence (External, Military, Institutional, Open, Closed, HUMINT, etc.)

- Intelligence platforms, applications and services.
- Data – Information – Intelligence
- Collective and Counterintelligence
- Psychology of Intelligence Analysis

### **Day 5: Intelligence Strategy**

- Incident management
- Cyber warfare
- Political and commercial risks
- Consuming and applying intelligence
- Developing an Intelligence driven strategy
- Strategic and Tactical Intelligence function
- Risk management

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## **Details**

### **Duration**

Five (5) Full Days Contact Classes

### **Cost and Registration**

R15490-00

<https://shortcourses.sun.ac.za/courses/c-15.html>

### **Venue**

Centurion, Gauteng

**Includes course packs, tools, refreshments and lunches**

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