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AI IN SECURITY COURSEWARE

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1. SECURITY – WHAT IS IT?

A coordinated set of activities to ensure availability, access, validity, authenticity of systems, tools, applications, operations and data being used for the designated purpose, in the right context, by the authorised operator for the rightful purpose.

A. Certification expectations

- i. Attendance is mandatory. Certification is not automatically granted. It must be earned.
- ii. Periodic reviews and training updates necessary to remain relevant.

2. ARTIFICIAL INTELLIGENCE – WHAT IS IT?

Intelligence – the ability to make an informed decision within the defined parameters. Utilising computed results but without the need to follow the results.

3. BRUTE FORCE AND INTELLIGENT SELECTION

Intelligence – the ability to make an informed decision within the defined parameters. Utilising computed results but without the need to follow the results.

4. PASSIVE V ACTIVE INTRUSION DETECTION AND HONEYPOTS

Intelligence – the ability to make an informed decision within the defined parameters. Utilising computed results but without the need to follow the results.

5. THE EXAM

Intelligence – the ability to make an informed decision within the defined parameters. Utilising computed results but without the need to follow the results.

A. Security

- i. Types of security
- ii. Attack vectors
- iii. The Law

B. Artificial Intelligence

- i. History
- ii. Types of AI
 - 1. *Hardware accelerators*
- iii. Ethics

C. Coding

- i. Languages used
- ii. Tools available
- iii. Pseudo-code

Day	Topic	Expected Outcome
1	Recap: Security, what is it?	Establish current methods for security attack vectors. The Law.
2	Intro: Artificial Intelligence, what is it?	Understand the history of AI, AI Winters, Machine Learning, Turing test, AGI, ethics
3	Brute force and intelligent selection examples	Practical coding of security examples
4	Passive v active intrusion detection and honeypots	Practical coding continuation
5	Exam prep, exam and feedback.	Pass/Fail certification