



Training Course Outline

ITU and Digital Bridge Institute (DBI)

Title	Emerging Cybercrime Trends: Cybercrime Investigation and Mobile Forensics
Modality	Online instructor led
Dates	May 30 – June 10, 2022
Duration	2 Weeks
Registration deadline	May 27, 2022
Training fees	150 USD
Description	This course presents a detailed methodological approach to understanding trends in cybercrimes and how cybercrimes can be investigated. It is a comprehensive course covering major forensic investigation scenarios that enable participants to acquire hands-on experience on various cybercrime investigation techniques and standard tools necessary to successfully carry-out cyber forensic investigation. This course will also teach participants how to gather electronic artifacts from mobile devices. This course does not include hacking into systems and networks
Code	22OI28001AFR-E

1.LEARNING OBJECTIVES

Objectives of the training course include the following:

1. Understand motives for cybercrime
2. Understand different threats and threat actors
3. Understand attackers' tactics, techniques and procedures
4. Understand information technology trends and associated crimes
5. Perform malware analysis
6. Understand and perform mobile forensics
7. Identify anti – forensics technique
8. Understand cyber insurance
9. Apply zero trust framework

2. LEARNING OUTCOMES

It is expected that upon completion of the training session, participants will be able to:

1. Discuss emerging cybercrime trends
2. Mitigate against cybercrimes
3. Perform cryptocurrency investigation



4. Perform email forensics
5. Perform malware analysis
6. Perform mobile forensics
7. Identify anti-forensics techniques
1. 6. Apply zero trust framework

3.TARGET POPULATION

This training is targeted at private investigators, intelligence analysts and law enforcement agents

4.ENTRY REQUIREMENTS

Participants Requirement

- Basic digital literacy skill
- Basic understanding of internet
- Basic understanding of cybersecurity

Laptop Requirement

- Minimum of 8Gb RAM
- Core i5 system processor
- 1TB Hard disk

5.TUTORS/INSTRUCTORS

Name of tutor(s)/instructor(s)	Contact details
Ms. Oloyede Olajumoke Elizabeth	Email: ooloyede@dbi.edu.ng Telephone: +2348060146414
Mr. Nelson Afundu	Email: nafundu@dbi.edu.ng
Mr. Ayodeji Idris	Email: aidris@dbi.edu.ng

6.TRAINING COURSE CONTENTS

Introduction to Cybercrime

- Introduction to cyberspace and cybercrime
- Types of cybercrimes
- Types of cybercriminals
- Motives of cybercriminals
- Understanding cyber attack
- Notable data breaches

Threats and Vulnerabilities

- Introduction to threat
- Types of threat
- Global threat landscape
- Introduction to vulnerability
- Types of vulnerability
- Vulnerability lifecycle management



Information Technology Trends

- IT evolution
 - The past: e.g mainframe, floppy disk, static website, infrared etc
 - The present: smart devices and cloud
 - The future: Internet of things, virtual reality, 5G
- Emerging trends
 - Cloud computing
 - IoT
 - Blockchain
 - Virtual reality
 - Augment reality

Emerging Cybercrime

- Business Email Compromise
- Cryptocurrency scams
- Cloud base attacks
- IoT- focused attack
- Hacking as a service
- Ransomware as a service
- Insider attack

Malware Analysis

- Introduction to malware analysis
- Dynamic analysis
- Static analysis
- Malware evasion techniques

Mobile Forensics

- Android Operating System
- Mobile forensic tools
- Anti – forensic techniques

Other trends

- Zero Trust Framework
- Cyber insurance

Practicals and tools

- Forensic tools
- Anti – forensic tools
- Malware analysis tools
- Wallets and Explorers
- Blockchain analytics tools

7.TRAINING COURSE SCHEDULE

Week / Session	Topic	Exercises and interactions
Week 1	Introduction to Cybercrime <ul style="list-style-type: none">• Introduction to cyberspace and cybercrime• Types of cybercrimes• Types of cybercriminals	<ul style="list-style-type: none">• Read course materials• Participate in online classes• Take quiz

	<ul style="list-style-type: none"> • Motives of cybercriminals • Understanding cyber attack • Notable data breaches <p>Threats and Vulnerabilities</p> <ul style="list-style-type: none"> • Introduction to threat • Types of threat • Global threat landscape • Introduction to vulnerability • Types of vulnerability • Vulnerability lifecycle management <p>Information Technology Trends</p> <ul style="list-style-type: none"> • IT evolution <ul style="list-style-type: none"> ○ The past: e.g mainframe, floppy disk, static website, infrared etc ○ The present: smart devices and cloud ○ The future: Internet of things, virtual reality, 5G • Emerging trends <ul style="list-style-type: none"> ○ Cloud computing ○ IoT ○ Blockchain 	<ul style="list-style-type: none"> • Participate in forum discussion • Write learning journal
Week 2	<p>Emerging Cybercrime</p> <ul style="list-style-type: none"> • Business Email Compromise • Cryptocurrency scams • Cloud base attacks • IoT- focused attack • Hacking as a service • Ransomware as a service • Insider attack <p>Malware Analysis</p> <ul style="list-style-type: none"> • Introduction to malware analysis • Dynamic analysis • Static analysis • Malware evasion techniques <p>Mobile Forensics</p> <ul style="list-style-type: none"> • Android Operating System • Mobile forensic tools • Anti – forensic techniques <p>Other trends</p> <ul style="list-style-type: none"> • Zero Trust Framework • Cyber insurance 	<ul style="list-style-type: none"> • Read course materials • Participate in online classes • Take quiz • Participate in forum discussion • Write learning journal • Submit assignment

8.METHODOLOGY (Didactic approach)

This course shall be delivered fully online. There will be instructor led sessions, case studies, forum discussions, weekly assignments, weekly learning journals and quizzes. All participants must do all the



assignments and quizzes and pass to be issued the ITU certificate. The instructor will have question and answer session once a week via ZOOM or Google Meet from 09.00hours to 12.00hours. Pre-recorded video will be made available on the ITU dashboard

9.EVALUATION AND GRADING

Evaluation of participants at this course will be based on the following:

- Class Attendance - 20% (10% per week)
- Quizzes - 20% (10% per week)
- Assignment - 20%
- Forum participation - 30% (15% per week)
- Learning journal – 10% (5% per week)

Only participants who have successfully completed all assessments with a pass mark of 60% shall be awarded the ITU Certificate.

10.TRAINING COURSE COORDINATION

Course Coordinator: Name: Mr. Paulinus O. UGWOKE Head, Research, Education and Training Department, Digital Bridge Institute, Abuja, NIGERIA Tel. No: +234 803 360 7540 Email address: pougwoke@dbi.edu.ng	ITU Coordinator: Name: Mr. Emmanuel NIYIKORA Programme Officer, ITU Area Office for West Africa, DAKAR Tel. No : +250 788312939 Email address: emmanuel.niyikora@itu.int
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