# PROFESSIONAL TRAINING COURSE



# 3 Days Course on Introduction to Digital Forensic First Responder (DF)







### **Introduction to Digital Forensic First Responder (DF)**

This course will provide a foundation in the field of Computer Forensics. The student will learn how to obtain and analyse digital information for possible use as evidence in civil, criminal or administrative cases. Topics include applications of hardware and software to computer forensics, computer forensics law, volume and file system analysis, computer forensics investigations, and computer forensics in the laboratory. Hands-on exercises guide discussions and reinforce the subject matter.

This course is designed as an introductory course in computer forensics. Students will first understand the need for computer forensics. Students will learn best practices for general incidence response. The course will then focus on the tools and techniques to perform a full computer forensic investigation.

**Course Settings** 

Date	Refer to Training Calendar		
Venue	Refer to Training Calendar		
Fees	Contact Us at sales@2-sigma.com		
Timings	0900-1700 (3 Days)		
Inclusive	Certificates and notes		
Audience	The course has been designed for IT personnel, administrators, computer support staffs and an end-user who are aware the importance of data in their storage. No previous repair or data recovery experience necessary.		



## **Data Recovery -Schedule**

Data Recovery -			
Day 1			
09.00am – 10.00am	Introduction to Computer Forensics		
	Course overview     Understanding the need for computer forencies		
	<ul> <li>Understanding the need for computer forensics</li> <li>Defining computer forensics</li> </ul>		
10.00am – 10.30am	Breakfast		
10.30am – 12.45pm	Computer Hardware		
121100111	Understanding the computer components		
	Digital Media		
	Hard disk basics		
	Computer Forensic Incidents		
	Introduction		
	The Legal System		
	Criminal Incidents		
	0.71		
	<ul><li>Computer Fraud</li><li>Internal Threats</li></ul>		
10 15 mg 00 15 mg	Investigative Challenges     Lunch		
12.45pm – 02.15pm			
02.15pm – 05.00pm	Digital Incident Response		
	Digital Incident Assessment		
	Initial Assessment · Type of Incident · Parties Involved		
	Incident / Equipment Location		
	Available Response Resources		
	Securing Digital Evidence		
	Chain of Custody		
	Potential Digital Evidence		
	OS / Disk Storage Concepts		
	OS / Disk Storage Concepts		
	Disk Based Operating Systems		
	OS / File Storage Concepts		
	Disk Storage Concepts 1		
	Demo - Creating a file and writing it to FAT/NTFS		
	Disk Storage Concepts 2		
	Slack Space		
	File Management - File Formats		
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Day 2			
09.00am – 10.00am Digital Acquisition & Analysis Tools			
	Digital Acquisition & Analysis Tools		
	Digital Acquisition		
	Terms Defined		
	Demo - Generic Hash Demo / Crypto Demo		
	Demo - Hashing a File		
	Digital Acquisition Procedures 1		
	Demo -Winhex Software		
	FTK Explorer / OsForensic		
	Demo - Osforensic Acquisition		
	Digital Acquisition Procedures 2		
	Digital Forensic Analysis Tools		
	Demo - Autopsy		
10.00am – 10.30am	Breakfast		
10.30am – 12.45pm	The Forensic Toolkit		
	Forensic hardware		
	Hardware write/blockers		
	Hard drive acquisitions		
	Processing the scene		
	Lab 1: Hard drive acquisition		
	E-mail Analysis		
	Viewing e-mail		
	Webmail		
	• POP		
10.45 00.45 00.	• IMAP		
12.45pm – 02.15pm	Lunch		
02.15pm – 05.00pm	File Signature Analysis  • File signatures		
	File extensions		
	Differences between		
	Identifying differences		
	Reading: Instructor Handouts		
	Forensic Examination Protocols		
	Forensic Examination Protocols		
	Demo - Create Disk Images		
	Demo - Data Recovery Exercise		
	"The 20 Basic Steps"		



	Demo - File Carving Exercise
	Day 3
09.00am – 10.00am	Other Windows Artifacts
	Common windows artifacts
	Recycle bin
	My Documents
	Recent files
	Installed programs
	Lab 8: Basic Computer Forensics Lab
10.00am – 10.30am	Breakfast
10.30am - 12.45pm	Image Restoration
	Live Acquisition
	Recovery and Searching
	<ul> <li>Password Cracking and Encryption</li> </ul>
	Data Carving
	Data recovery: identifying hidden data, Encryption/Decryption,
	Steganography,
	Recovering deleted files.
	Digital evidence controls: uncovering attacks that evade
	detection by Event Viewer, Task Manager.
	Windows GUI tools, data acquisition, disk imaging, recovering
	swap files, temporary &cache files
12.45pm – 02.15pm	Lunch
02.15pm – 05.00pm	Anti-Forensics
	Traditional methods
	Overwriting Data and Metadata
	<ul> <li>Cryptography, Steganography, and other Data Hiding</li> </ul>
	Approaches  o Decrypting EFS
	Decrypting EFS     Non-traditional methods
	Targeting forensic tool blind spots
	<ul> <li>Targeting forensic tool blind spots</li> <li>Targeting forensic tool vulnerabilities</li> </ul>
	<ul> <li>Targeting generic tool/lib vulnerabilities</li> </ul>
	Digital Evidence Presentation
	Processing a complete forensic case
	Preparing a forensic report
	Digital Evidence Presentation
	The Best Evidence Rule conclusion



### **More Information**

**Two Sigma Technologies** 

19-2, Jalan PGN 1A/1, Pinggiran Batu Caves,

68100 Batu Caves, Selangor

Tel: 018-3651369/Fax: 03-61880602

To register, please email to <u>zurina@2-sigma.com</u> or fax the registration form to 03-61880602, we will contact you for further action.