ACKERU



# Introduction To Malware Analysis

CR112



### Introduction To Malware Analysis

#### Outline

Malware analysis is a field common to both offensive & defensive security. This course introduces the basics of malware analysis and the use of manual & automated tools to analyze malicious activity & files. During this course, students will learn how to identify & analyze various types of malware. The curriculum focuses on static & dynamic malware analysis techniques. Topics include suspicious file analysis, process monitoring & analysis & network traffic monitoring & analysis. Students will also learn how anti-virus applications operate, and how to create custom AV detection rules.



#### Target Audience

- SoC analysts and incident responders.
- I Junior level penetration testers.
- System security personnel who are interested in malware analysis.



#### Prerequisites

Before attending this course, students must have the following technical knowledge:

- I Working knowledge of the Windows OS and information security.
- Basic knowledge of the Linux OS.
- Basic knowledge of a programming language.



#### Objectives

Upon completing this course, students will be able to:

- Analyze simple and mid-level malware.
- I Investigate malware in contained environments.
- Investigate systems and networks for indicators of compromise.



### 1 Introduction to Malware Analysis

- What is Malware analysis
- I Types of malware
- Malware analysis types
- Structure of PE files & analysis
- I Static analysis methodology
- Sysinternals Suite

#### 1 **Module 02** 1 Understanding Anti Virus's

- VirusTotal
- AV engines
- Yara Rules
- I IoC's and finding them
- I ClamAV rule-based detection
- File signatures & manually creating file signatures

### 2 Basic Dynamic Analysis

- Dynamic analysis methodology
- Dynamic analysis environments
- DLL files analysis
- Filesystem monitoring
- Registry analysis
- Network monitoring

### 2 Sysmon & Sandboxing

- I Sysmon installation & Configuration
- Sysmon Rule-based detection
- Sandbox analysis
- Malware samples

### **identify and analyze** various types of malware"

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## The HackerU Advantage

We have unparalleled experience in building advanced training programs for companies and organizations around the world – Talk to one of our experts and find out why.

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Handcrafted Training Programs



State-Of-The-Art Learning Materials 03

Israel's Premier Training Center



Fueled by Industry Leading Cyber Experts



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Over 20 Years of Proven IT-Education Success



