

# Python Training Immersion Course

## COURSE DESCRIPTION

SecureNinja's (5) five day **Python 3** immersion course is for security professionals that have very little programming experience.

If you've ever struggled in a programming class because you wanted the instructor to put programming concepts in plain and simple English and if you've ever wanted a programming course to be about stuff you could actually use at work - this class is for you.

This is a functional programming course focused on programming concepts that can be used to accomplish common security tasks such as log parsing, password cracking, port scanning, vulnerability testing, web application security testing, malware analysis, and exploit development. There won't be a bunch of math, no CD collection databases, and no useless programming mumbo jumbo.

Each day the students will learn a few basic programming concepts, and then use some sample code (skeleton scripts) to perform security tasks. The students will keep the skeleton scripts so that when they get back to work they'll have something that they can use a crib sheet to do other security tasks.

## WHO WOULD BENEFIT

IT System Administrators, IT Security Professionals

## COURSE LENGTH

- 5 days

## FOLLOW ON COURSES

- Cyber War

## COURSE DETAILS

Day 1: Programming Concepts, Parsing Files, Logs, and PCAPs

- Python 3 Basics
- Text File Parsing
- Log Parsing
- PCAP Parsing

Day 2: System Administration and Password Cracking

- Windows and \*nix Administration
- Password Cracking

- Netcat-like Functionality
- Port-Scanning

### Day 3: Network and Web Application Vulnerability Testing

- Vulnerable Service Identification
- SQL Injection
- XSS
- RFI/LFI

### Day 4: Forensics and Malware Analysis

- Memory Analysis
- Identifying/Classifying Malware
- HexEditing/Dissabling Malware

### Day 5: Reverse Engineering, Fuzzing and Exploit-Dev

- Debugging
- Protocol Fuzzing
- File Format Fuzzing
- Exploiting Software