

## Android Attack & Defend

### Course Summary

#### Description

Android Attack & Defend is a hands-on, intensive programming course designed to teach the fundamentals of software development for the Android platform. Through a combination of instructor-led demonstrations and laboratory programming assignments and challenges, students will build and enhance their practical knowledge of software development for the Android operating system. They will learn to write, execute, and troubleshoot software both in an Android emulator and on Android devices. After mastering the basics, students will advance in this course to reverse engineering malware, hacking Android devices, and modifying applications from their original state as well as mitigations against this. The course concludes with a capstone exercise, in which students will create an application that can exploit and remotely mine data from Android devices.

#### Topics

- Android Architecture and Design
- Android Software and Application Development Kits
- The Network Stack and Yamba
- Reverse Engineering Android Applications
- Hacking Android Phones

#### Audience

This course is designed for: Security Analysts, Network Security Engineers, Software Developers, Malware Analysts, Incident Response Analysts, and Penetration Testers.

#### Prerequisites

The ideal student should have C programming as well as Python, Perl or Java experience. Recommended prerequisites include: Introduction to C Programming, Introduction to Python, Introduction to Perl or Introduction to Java.

#### Duration

Five days