

Introduction to Ethical Hacking and Kali Linux

Location	Stretford Campus
Course Type	Adult
Department	Computing
Start Date	Monday 3rd February 2025
Duration	Part-time, 11 Weeks
Time	09:30 - 11:30
Fee	£ 120.00 You may be eligible for support with your tuition fees - please visit the college website - funding and finance page for further information
Course Code	TPQ-CPXZ-1004

Course Overview

The course is designed for people who would like to know about hacking techniques, protecting systems from attacks and networking technologies. We will use a mix of tutor delivery and digital resources. The course will cover the theory behind computing security but there will also be a lot of practical elements.

Course Requirements

Participants are not required to possess any previous knowledge or expertise. We welcome individuals with a genuine enthusiasm for the subject and a willingness to actively engage and contribute.

What You Will Learn

The course will cover topics relating to;

Introduction to network technologies

Setting up a Virtual environment

Using Kali Linux

Encryption & Steganography

Kali Linux Tools

Switch Security

DOS & Ransomware attacks

Password Cracking

Penetration Testing

Social Engineering

Assessment

There will be no formal assessment.

Progression

Upon successfully completion of the course students may progress to a more advanced class in computing

Career Options

Completing an Introduction to Ethical Hacking and Kali Linux" course can open up various career options in the field of cybersecurity and ethical hacking. Ethical hacking involves identifying and addressing security vulnerabilities in computer systems and networks, and Kali Linux is a popular operating system and toolset used for penetration testing and ethical hacking. Here are some potential career paths and roles you can consider:

Penetration Tester (Ethical Hacker): This is the most direct career path. Penetration testers are hired to identify and exploit vulnerabilities in systems, networks, and applications to help organisations strengthen their security.

Cybersecurity Analyst: As a cybersecurity analyst, you'll focus on monitoring and defending systems against security threats. Your skills in ethical hacking can be valuable for identifying and mitigating vulnerabilities.

Security Consultant: Security consultants work with organizations to assess their security posture, recommend improvements, and implement security measures. Ethical hacking skills are crucial for this role.

Incident Responder: Incident responders handle cybersecurity incidents and breaches. Your knowledge of hacking techniques can help in analysing and containing security incidents.

Security Researcher: Security researchers investigate and discover new vulnerabilities, often for the purpose of responsible disclosure or for creating patches. This can be a role in academia or with security companies.

Forensic Analyst: Forensic analysts use their skills to investigate cybercrimes and gather evidence for legal cases. Understanding hacking techniques is essential in this role.

Network Security Administrator: You can work as a network security administrator, responsible for configuring and maintaining security measures on network devices and servers.

Red Team Member: In some organisations, red team members simulate real-world attacks to test the organisation's defences. Your ethical hacking skills can be crucial in these exercises.

Security Trainer or Instructor: If you excel at teaching and explaining complex technical concepts, you can become a security trainer or instructor, helping others learn about ethical hacking and cybersecurity.

Security Blogger or Writer: If you have strong communication skills, you can write about cybersecurity topics, share your knowledge, and provide guidance to a broader audience.

Chief Information Security Officer (CISO): With experience and further education, you can aim for leadership roles in cybersecurity, such as CISO, where you'll be responsible for the organisation's

overall security strategy.

To excel in any of these roles, it's important to continuously update your skills, stay informed about the latest cybersecurity threats and trends, and possibly pursue certifications such as Certified Ethical Hacker (CEH) or CompTIA Security+ to demonstrate your expertise. Networking and participation in the cybersecurity community, along with contributing to open-source projects and attending relevant conferences, can also help you build a successful career in ethical hacking and cybersecurity."

Mandatory Units

There are no mandatory units.

Contact Details

For further information please contact T: 0161 886 7070 or E: info@trafford.ac.uk

Disclaimer

Although every care has been taken to ensure that the information contained within this document is accurate, there may be changes to this programme and provision. We will endeavour to keep prospective and current students updated where appropriate and when the information becomes available.