

Masterclass:

CYBERSECURITY: VULNERABILITY ASSESSMENTS & PENETRATION TESTING

INTRODUCTION

This course explores cybersecurity concepts in various contexts. Designed for students with no security experience or background, this course covers basic terminology and concepts. The course covers planning, reconnaissance, scanning, exploitation, post-exploitation, and result reporting. Topics include an overview of information security frameworks; network infrastructure security; security and cryptography; information security policy; and defense in depth.

It will provide an understanding of common vulnerabilities and it will teach them how to ethically scan and test these, so that to allow them to explain their implications and give recommendations for remedial action.

COURSE LEARNING OUTCOMES (CLO)

- Describe the importance of information and cyber security to business and society.
- Discuss the common vulnerabilities in protocols, systems, networks and applications.
- Produce reports that contain evidence of computer system security vulnerabilities in a system.

WHO CAN ATTEND THIS MASTERCLASS?

This is open to all undergraduate students.

CERTIFICATION

Certificate of Completion in Master Class Cybersecurity: Vulnerability Assessments & Penetration Testing

COURSE OUTLINE

1. Introduction
2. Security Risk Management
3. Legal and Ethical Issues in Computer Security
4. Introduction to Pentesting
5. Target Information Gathering
6. Penetration Testing and Tools
7. Vulnerability Assessment

