Ethical Hacking

Module Information

2022.01, Approved

Summary Information

Module Code	6617YCOM
Formal Module Title	Ethical Hacking
Owning School	Computer Science and Mathematics
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 6
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
YPC International College (Kolej Antarabangsa YPC)

Learning Methods

Learning Method Type	Hours
Lecture	22
Practical	22
Tutorial	11

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-PAR	PAR	September	12 Weeks

Aims and Outcomes

Aims	To gain a significant understanding of various security vulnerabilities in and cyber threats to computer systems/applications as well as the importance of cyber security.To assess critically a variety of ethical hacking tools and techniques for the protection and evaluation of computer systems and applications.To promote the use of appropriate security techniques to solve cyber security problems.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Identify ethical, legal and social issues around the use of hacking.
MLO2	2	Provide creative solutions in relation to practical security problems
MLO3	3	Analyse methods of ethical hacking for the evaluation of networked information systems
MLO4	4	Critically review existing research-based defence solutions

Module Content

Outline Syllabus	Ethical hacking: Ethical hacking fundamentals; security vulnerabilities; attack foot printing; attack scanning techniques; system hacking methods; network and device hacking techniques; application and data hacking methods; ethical hacking planning; and ethical hacking reporting and responding.Ethical, Legal and Social: UK, EU and International Cybercrimes laws and regulations.
Module Overview	
Additional Information	The spectacular growth of the Internet has spawned a great demand for secure computer systems. Ethical hacking can help to assess the cyber security defence of computer systems. Intrusion detection and firewalls provide additional layers of defence for the detection and prevention of cyber attacks on computer systems. This module examines various cyber security issues and solutions within these areas.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Artefacts	Report on Hacking Tools	40	0	MLO1, MLO2
Practice	Hacking and Defence Scenario	60	0	MLO3, MLO4

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Alex Akinbi	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings

| Contact Name | Applies to all offerings | Offerings |