

Ethical Hacking

Module Code:	COS7029-B
Academic Year:	2018-19
Credit Rating:	20
School:	Department of Computer Science
Subject Area:	Computer Science
FHEQ Level:	FHEQ Level 7 (Masters)

Pre-requisites:

Co-requisites:

Contact Hours

Type	Hours
Lectures	12
Laboratory	36
Directed Study	152

Availability Periods

Occurrence	Location/Period
BDA	University of Bradford / Semester 2 (Feb - May)

Module Aims

To develop a comprehensive understanding of how to secure business systems.

Outline Syllabus

Background to ethical hacking; footprint and reconnaissance; scanning networks; enumeration; system hacking; Trojans, backdoors, sniffers, viruses and worms; social engineering; DoS; hijacking and hacking; cryptography and penetration testing.

Module Learning Outcomes

On successful completion of this module, students will be able to...

- 1 Evaluate and apply an advanced and systematic understanding of how to secure systems by using hacking tools for penetration testing.
- 2 Deal with the complex issues involved in effectively securing systems both systematically and creatively.
- 3
 1. Further advance your skills of research, problem-solving and communication.
 2. Be a self-directed, independent learner who shows initiative and personal responsibility.

Learning, Teaching and Assessment Strategy

Formal input provided by lectures (LO1) and lab based exercises (LO2, LO3a). Students will participate in exercises to learn how to scan, test and hack in order to effectively secure systems. The lab intensive module facilitates knowledge acquisition and practical experience with current security systems (LO1, LO2, LO3a, LO3b).

Assessment by coursework takes account of the practical security environment and the theoretical material discussed in class and tests all learning outcomes.

Mode of Assessment

Type	Method	Description	Length	Weighting	Final Assess'
Summative	Coursework	Ethical Hacking Exercise (develop and document a penetration test). Equivalent to 4000 words.	0 hours	100%	Yes

Legacy Code (if applicable)

CM-1074D

Reading List

To view Reading List, please go to [rebus:list](#).