

Module Details	
Module Title	System Security Management
Module Code	COS5017-B
Academic Year	2024/5
Credits	20
School	School of Computer Science, AI and Electronics
FHEQ Level	FHEQ Level 5

Contact Hours	
Type	Hours
Lectures	12
Tutorials	12
Laboratories	12
Directed Study	164

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 2

Module Aims
<p>This module aims to provide the fundamental skills needed to analyse the internal and external security threats against a network and to implement security mechanisms to protect an organisation's information system. The module helps to evaluate network and Internet security issues and provides security solutions such as designing a security policy, implementing robust defensive measures against emerging threats, etc.</p>

Outline Syllabus
<p>This module will briefly cover part or all of the following:</p> <p>Potential vulnerabilities and threats to network infrastructure; the implication of network security breaches and countermeasures; security controls and strategies to implement and configure these controls; networking devices and strategies for secure configuration of these devices; Security policies, Security tools; Network perimeter security for Windows and Linux operating systems.</p>

Learning Outcomes	
Outcome Number	Description
01	Understand fundamentals security concepts, assess potential vulnerabilities and threats to network infrastructure, predict the implication of network security breaches and analyse the available countermeasures
02	Examine different network security mechanisms, analyse available security controls and develop strategies to implement and configure these controls
03	Understand the role of network security policies, and develop comprehensive policies that help in protecting network infrastructure.

Learning, Teaching and Assessment Strategy
<p>The module time is made up of formal lectures, laboratory practical sessions, tutorials, private study and directed reading. This module develops and enhances skills and familiarity with technologies related to information security.</p> <p>Any student taking supplementary assessment is required to repair the deficiency in the original assessment. All assessments are based on preparation of research reports.</p>

Mode of Assessment			
Type	Method	Description	Weighting
Summative	Examination - Closed Book	Closed Book Examination (2 Hrs)	70%
Summative	Examination - practical/laboratory	Lab Test (1.5 Hrs)	30%

Reading List
To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.

© University of Bradford 2024

<https://bradford.ac.uk>