

MODULE SPECIFICATION

Part 1: Information							
Module Title	Computer Security						
Module Code	UFCFHE-30-3		Level	Level 6			
For implementation from	2019-20						
UWE Credit Rating	30		ECTS Credit Rating	15			
Faculty	Faculty of Environment & Technology		Field	Computer Science and Creative Technologies			
Department	FET [Dept of Computer Sci & Creative Tech					
Module type:	Stand	Standard					
Pre-requisites		None					
Excluded Combinations		None					
Co- requisites		None					
Module Entry requirements		None					

Part 2: Description

Educational Aims: See Learning Outcomes

Outline Syllabus: Software Security in the real world: analysing systems and security aware applications from various domains such as mobile communications, electronic commerce, banking and finance.

Trusted computing and trust in electronic commerce and the existence of a trusted computing base.

Policies for managing security, policy languages and models.

Trust and Reputation and the basis for authorization decisions; the notion of trust and how to express it (subjective logic, trust and uncertainty, rating systems and reputations servers); the eBay reputation server as an example; communities of trust.

Security analysis; assumptions made, social basis and threat assumptions. Trade off between threats and countermeasures and the return on security investment (RoSI).

Information Security Management Standards and Codes of Practice. Legislation. The interrelation

STUDENT AND ACADEMIC SERVICES

and interdependency of security management and other system management activities and considerations such as:- Business continuity management, organisational security, asset classification and control, personnel security, physical and environmental security, communications and operations management, systems development and maintenance, business continuity management and compliance.

Teaching and Learning Methods: 108 hours scheduled learning

192 hours for independent research and assessment preparation.

Scheduled learning will typically include lectures, seminars, supervision and an interactive forum.

All students are expected to attend a series of tutorials.

Introductory lectures are supported by seminars, case studies, visits and practical workshops. In addition this module will be supported by interactive forums and learning tools.

300 hours study time of which 108 hours will represent scheduled learning.

Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion. Student study time will be organised each week with a series of both essential and further readings and preparation for practical workshops.

This unit takes a broad view of computer security within an organisational context, addressing hardware, software and management related issues that require both a reactive and proactive approach to ensure business continuity. A practical approach will be used to the develop the tools and techniques for the effective implementation of computer security within a commercial environment.

Part 3: Assessment

A range of assessment techniques will be employed to ensure that learners can meet the breadth of learning outcomes presented in this module alongside the ability to demonstrate transferable skills e.g. communication skills.

Exam: Security tools and techniques.

Reflective research essay: Students will be expected to analyse a given scenario, identify security issues and make suitable recommendations for enhance the measures in place in order to ensure business continuity.

First Sit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B	✓	50 %	Reflective research essay (2500 words)
Examination - Component A		50 %	Unseen Exam (2 hours)
Resit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B	✓	50 %	Reflective research essay (2500 words)
Examination - Component A		50 %	Unseen Exam (2 hours)

Learning	On successful completion of this module students will achieve the follo	wing learning	outcomes:					
Outcomes		wing loanning (
	Module Learning Outcomes	ning Outcomes						
	Demonstrate analysis of the motivations leading to malicious behaviour							
	Identify and evaluate a range of real world security issues faced by c organisations		MO2 MO3					
	Devise appropriate management strategies and procedures to counter threats							
	Appraise the usefulness of a range of security techniques for dealing particular situations	with	MO4 MO5					
	Assess security risks and produce a security policy							
	Evaluate the goals and techniques of effective organization and imple information security	MO6 MO7						
	Critically appraise the significance of UK security laws, regulations and standards in relation to global issues							
	Identify the components required for a successful disaster recovery process							
Contact Hours	Independent Study Hours:							
	Independent study/self-guided study 192							
	Total Independent Study Hours: 19							
	Scheduled Learning and Teaching Hours:							
	Face-to-face learning	10	18					
	Total Scheduled Learning and Teaching Hours: 10							
	Hours to be allocated	0						
	Allocated Hours	30	300					
Reading List	The reading list for this module can be accessed via the following link:							
	https://uwe.rl.talis.com/index.html							

Part 4: Teaching and Learning Methods

Part 5: Contributes Towards

This module contributes towards the following programmes of study: