Module Specification

Security Management in Practice

Version: 2021-22, v2.0, 01 Jun 2021

Contents

Part 1: Information

Module title: Security Management in Practice

Module code: UFCFRB-15-3

Level: Level 6

For implementation from: 2021-22

UWE credit rating: 15

ECTS credit rating: 7.5

Faculty: Faculty of Environment & Technology

Department: FET Dept of Computer Sci & Creative Tech

Partner institutions: None

Delivery locations: Frenchay Campus, School for Higher and Professional Education, Taylors University

Field: Computer Science and Creative Technologies

Module type: Standard

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: This module will provide students with an understanding of Information Security Management Systems (ISMS), to assess information risk in the context of business operations.

Features: Not applicable

Educational aims: Through case studies and real-world news events, students will explore cyber security issues from the perspective of risk, and how companies can manage risk that is associated with information assets. Students will work to develop their own ISMS plans for a chosen organisation, and will learn to developing their critical thinking skills through justification of proposed actions to mitigate risk.

Outline syllabus: Software Security in the real world: Threats, costs and countermeasures

Policies for managing security, policy languages and models

Information Security Management Standards. ISO 2001/2002, Codes of Practice. Legislation.

Security analysis; assumptions made, social basis and threat assumptions.

Analysing systems and security aware applications from various domains such as mobile communications, electronic commerce, banking and finance.

Planning for an ISMS: Planning stages, understanding the organisation, - ways and means. Planning the “right” system.

Trade off between threats and countermeasures and the return on security investment (RoSI).

Information security risk assessment: risk analysis methods, risk treatment

The interrelation and interdependency of security management and other system management activities and considerations such as:- Business Continuity Management, Organizational Security, Asset Classification and Control, etc.

Planning and managing a disaster recovery operation. Business Continuity Planning

Part 3: Teaching and learning methods

Teaching and learning methods: A series of seminars at the start of the module will cover background knowledge. The seminars will be predominantly tutor-led. Students are expected to prepare for the seminars by reading from the module text and from research papers as directed. They are also expected to identify their own information (see below). The seminars will then explore the issues raised by the reading, usually based on worksheets and often in the context of a case study.

The coursework will require the students will perform a security analysis of an organisation's information systems, propose a security policy and make recommendations about the implementation of that policy. This work will be based on the analysis of real organisation and may be conducted with an external organisation if it can be arranged.

Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion etc.

Module Learning outcomes:

MO1 Understand the significance of ISO and other standards in the specification of a Information Security Management System

MO2 Analyse the range of real world security issues that face commercial organisations and other institutions

MO3 Evaluate the significance of security laws and regulations

MO4 Propose an ISMS for a real organisation, using recognised methods and to an internationally recognised standard

MO5 Reflect on the process of specifying an ISMS, justifying methods used and /or proposing alternatives

Hours to be allocated: 150

Contact hours:

Independent study/self-guided study = 114 hours

Face-to-face learning = 36 hours

Total = 150

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/ufcfrb-15-3.html

Part 4: Assessment

Assessment strategy: The module is assessed by an individual report and a video presentation. The report will present a planning document for implementing an Information Security Management Systems (ISMS) for a company of their choice, addressing why this is important, real-world incidents that motivate the need, asset identification, risk assessment and risk treatment plans. The video presentation will present this information to the C-board to make a convincing argument for why an ISMS is valuable for the organisation, drawing on and extending upon the information presented in their report.

Assessment components:

Presentation - Component A (First Sit)
Description: Individual video presentation (10 mins)
Weighting: 25 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO1, MO2, MO3

Report - Component B (First Sit)
Description: Individual report (3000 words)
Weighting: 75 %
Final assessment: No
Group work: No
Learning outcomes tested: MO4, MO5

Presentation - Component A (Resit)
Description: Individual video presentation (10 mins)
Weighting: 25 %
Final assessment: No
Group work: No
Learning outcomes tested:

Report - Component B (Resit)
Description: Individual report (3000 words)
Weighting: 75 %
Final assessment: Yes
Group work: No
Learning outcomes tested:

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Information Technology {Top-Up} [Sep][FT][Gloscoll][1yr] BSc (Hons) 2021-22

Business Computing [Sep][FT][Frenchay][3yrs] BSc (Hons) 2019-20

Forensic Computing and Security [Sep][FT][Frenchay][3yrs] BSc (Hons) 2019-20

Forensic Computing and Security [Sep][SW][Frenchay][4yrs] BSc (Hons) 2018-19

Forensic Computing and Security {Foundation} [Sep][FT][Frenchay][4yrs] BSc (Hons) 2018-19

Business Computing [Sep][SW][Frenchay][4yrs] BSc (Hons) 2018-19

Business Computing {Foundation} [Sep][FT][Frenchay][4yrs] BSc (Hons) 2018-19

Computer Security and Forensics {Foundation} [Feb][FT][GCET][4yrs] BSc (Hons) 2018-19

Computer Security and Forensics {Foundation} [Oct][FT][GCET][4yrs] BSc (Hons) 2018-19