



Unit Outline (Higher Education)

Institute / School: Institute of Innovation, Science & Sustainability

Unit Title: Electronic Commerce Security

Unit ID: ITECH7607

Credit Points: 15.00

Prerequisite(s): Nil

Co-requisite(s): Nil

Exclusion(s): Nil

ASCED: 029901

Description of the Unit:

This course provides students with the background and knowledge to identify and analyse the security threats to e-commerce systems. It gives students the theoretical knowledge and skills that they need to develop appropriate countermeasures against security threats and incidents. Legal, social and ethical aspects of e-commerce security will also be discussed.

Grade Scheme: Graded (HD, D, C, P, MF, F, XF)

Work Experience:

No work experience

Placement Component:

Supplementary Assessment: Yes

Where supplementary assessment is available a student must have failed overall in the Unit but gained a final mark of 45 per cent or above, has completed all major assessment tasks (including all sub-components where a task has multiple parts) as specified in the Unit Description and is not eligible for any other form of supplementary assessment.

Course Level:

Level of Unit in Course	AQF Level of Course						
Level of Offic III Course	5	6	7	8	9	10	
Introductory							

Level of Unit in Course	AQF Level of Course					
Level of Unit in Course	5	6	7	8	9	10
Intermediate						
Advanced					~	

Learning Outcomes:

Knowledge:

- K1. Demonstrate an understanding of the complexity of information security;
- **K2.** Discuss the technical, social and ethical aspects of e-commerce security;
- **K3.** Reflect and respond to major issues in the management of information security;

Skills:

- **S1.** Identify and assess the critical threats to an e-commerce system;
- **S2.** Perform a preliminary security audit of a system;
- **S3.** Select appropriate technical solutions to harden e-Commerce functions.

Application of knowledge and skills:

A1. Plan for and react to a simulated security incident;

Unit Content:

Introduction to Computer and Network Security.

Threats to an E-commerce System.

Physical Security, Firewalls, and Inter-Network Security.

Viruses and Worms.

Encryption, Authentication, Digital Signature, and Digital Certificate.

Security Protocols, including SSL (Secure Sockets Layer) and SET (Secure Electronic Transaction), and S-HTTP (Secure Hypertext Transfer Protocol).

Management of E-commerce Security.

Auditing and Risk Analysis.

Incident Handling and Recovery.

Legal and Social Issues in E-Commerce Security.

FEDTASKS

Federation University Federation recognises that students require key transferable employability skills to prepare them for their future workplace and society. FEDTASKS (**T**ransferable **A**ttributes **S**kills and **K**nowledge) provide a targeted focus on five key transferable Attributes, Skills, and Knowledge that are be embedded within curriculum, developed gradually towards successful measures and interlinked with cross-discipline and Cooperative Learning opportunities. *One or more FEDTASK, transferable Attributes, Skills or Knowledge must be evident in the specified learning outcomes and assessment for each FedUni Unit, and all must be directly assessed in each Course.*



FEDTASK attribute and descriptor		Development and acquisition of FEDTASKS in the Unit		
		Learning Outcomes (KSA)	Assessment task (AT#)	
FEDTASK 1 Interpersonal	Students at this level will demonstrate an advanced ability in a range of contexts to effectively communicate, interact and work with others both individually and in groups. Students will be required to display high level skills in-person and/or online in: • Using and demonstrating a high level of verbal and non-verbal communication • Demonstrating a mastery of listening for meaning and influencing via active listening • Demonstrating and showing empathy for others • High order skills in negotiating and conflict resolution skills\\ • Demonstrating mastery of working respectfully in cross-cultural and diverse teams.	Not applicable	Not applicable	
FEDTASK 2 Leadership	Students at this level will demonstrate a mastery in professional skills and behaviours in leading others. • Creating and sustaining a collegial environment • Demonstrating a high level of self -awareness and the ability to self-reflect and justify decisions • Inspiring and initiating opportunities to lead others • Making informed professional decisions • Demonstrating initiative in new professional situations.	Not applicable	Not applicable	
FEDTASK 3 Critical Thinking and Creativity	Students at this level will demonstrate high level skills in working in complexity and ambiguity using the imagination to create new ideas. Students will be required to display skills in: • Reflecting critically to generate and consider complex ideas and concepts at an abstract level • Analysing complex and abstract ideas, concepts and information • Communicate alternative perspectives to justify complex ideas • Demonstrate a mastery of challenging conventional thinking to clarify complex concepts • Forming creative solutions in problem solving to new situations for further learning.	Not applicable	Not applicable	
FEDTASK 4 Digital Literacy	Students at this level will demonstrate the ability to work competently across a wide range of tools, platforms and applications to achieve a range of tasks. Students will be required to display skills in: • Mastering, exploring, evaluating, managing, curating, organising and sharing digital information professionally • Collating, managing complex data, accessing and using digital data securely • Receiving and responding professionally to messages in a range of professional digital media • Contributing competently and professionally to digital teams and working groups • Participating at a high level in digital learning opportunities.	Not applicable	Not applicable	
FEDTASK 5 sustainable and Ethical Mindset	Students at this level will demonstrate a mastery of considering and assessing the consequences and impact of ideas and actions in enacting professional ethical and sustainable decisions. Students will be required to display skills in: • Demonstrate informed judgment making that considers the impact of devising complex solutions in ambiguous global economic environmental and societal contexts • Professionally committing to the promulgation of social responsibility • Demonstrate the ability to evaluate ethical, socially responsible and/or sustainable challenges and generating and articulating responses • Communicating lifelong, life-wide and lifedeep learning to be open to the diverse professional others • Generating, leading and implementing required actions to foster sustainability in their professional and personal life	Not applicable	Not applicable	

Learning Task and Assessment:



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Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1, K2, K3, S1, S2, S3, A1	Completion of laboratory exercises	Demonstration of completion and/or quiz	10-20%
K1, K2, K3	Evaluate a web or e-Commerce system or design	Assignments	20 - 30%
K1, K2, K3, S1, S2, S3, A1	Propose a design to solve a security problem with a web or e-Commerce system	Assignments	30 - 40%
K1, K2, K3, S1, S3	Study course material, read and summarize theoretical aspects of the course	Test(s), and/or Presentations	20% - 30%

Adopted Reference Style:

APA ()

Refer to the <u>library website</u> for more information

Fed Cite - referencing tool