



Course Outline (Higher Education)

Institute / School:	Institute of Innovation, Science & Sustainability
Course Title:	ELECTRONIC COMMERCE SECURITY
Course ID:	ITECH7607
Credit Points:	15.00
Prerequisite(s):	(ITECH3212 or ITECH7212)
Co-requisite(s):	Nil
Exclusion(s):	Nil
ASCED:	029901

Description of the Course:

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)

Placement Component: No

Supplementary Assessment: Yes

Where supplementary assessment is available a student must have failed overall in the course but gained a final mark of 45 per cent or above and submitted all major assessment tasks.

Program Level:

Level of course in Program	AQF Level of Program					
	5	6	7	8	9	10
Introductory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intermediate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advanced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>

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;

Course Content:

Topics may include:

- 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**tttributes **S**kills and **K**nowledge) provide a targeted focus on five key transferable Attributes, Skills, and Knowledge that are embedded within curriculum, developed gradually towards successful measures and interlinked with cross-discipline and Co-operative Learning opportunities. *One or more FEDTASK, transferable Attributes, Skills or Knowledge must be evident in the specified learning outcomes and assessment for each FedUni course, and all must be directly assessed in each program.*

FEDTASK attribute and descriptor	Development and acquisition of FEDTASKS in the course	
	Learning Outcomes (KSA)	Assessment task (AT#)

FEDTASK attribute and descriptor		Development and acquisition of FEDTASKS in the course	
		Learning Outcomes (KSA)	Assessment task (AT#)
FEDTASK 1 Interpersonal	<p>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:</p> <ul style="list-style-type: none"> • 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	<p>Students at this level will demonstrate a mastery in professional skills and behaviours in leading others.</p> <ul style="list-style-type: none"> • 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	<p>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:</p> <ul style="list-style-type: none"> • 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 	A1	AT3
FEDTASK 4 Digital Literacy	<p>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:</p> <ul style="list-style-type: none"> • 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 attribute and descriptor		Development and acquisition of FEDTASKS in the course	
		Learning Outcomes (KSA)	Assessment task (AT#)
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: <ul style="list-style-type: none"> • 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 life-deep 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:

This course is delivered in the form of directed learning activities, lectures and tutorials. The tutorials provide students with an opportunity to undertake practical work that will be assessed. Students are expected to explore issues through their own reading and to share their ideas through research and discussions. There is a final examination based on the material presented in lectures and hands-on work in tutorials.

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1, K2, S1	Completion of laboratory exercises	Demonstration of completion and/or quiz	10-20%
K2, S2	Evaluate a web or e-Commerce system or design	Assignments	20 - 30%
K2, 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, S2, 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 [library website](#) for more information

Fed Cite - [referencing tool](#)