Course Outline (Higher Education)

Institute / School:	Institute of Innovation, Science & Sustainability
Course Title:	EMERGING INFORMATION SYSTEMS
Course ID:	ITECH2304
Credit Points:	15.00
Prerequisite(s):	(ITECH1100)
Co-requisite(s):	Nil
Exclusion(s):	Nil
ASCED:	020399

Description of the Course:

This course provides students with an awareness of current and evolving Emerging Technologies that support and disrupt organisations and society. We emphasise the technical fundamentals of information and communication technologies, including hardware, software, people, and processes. The course highlights the way in which Emerging Technologies can transform industries, business models and society in general. Challenges associated with Emerging Technologies, including their regulation and negative impacts, are also covered.

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	☐	☐	☐	☐	☐	☐
Intermediate	☐	☐	✔	☐	☐	☐
Advanced	☐	☐	☐	☐	☐	☐

Learning Outcomes:

Knowledge:

K1. Explain how new information and communication technologies are emerging to enhance and sometimes disrupt organisations.

K2. Differentiate between major types of emerging information and communication technologies

K3. Define concepts related to the regulation of emerging technologies.

K4. Identify features used to analyse industries, business models and competitiveness.

K5. Explain challenges associated with emerging technologies, sociopolitical systems and sustainability

K6. Explain the impact of emerging technology life cycles on strategic planning

Skills:

S1. Review and propose business models

S2. Compare knowledge management and decision making tools.

S3. Analyse an organisation and determine the potential benefits of applying emerging technologies.

S4. Appraise an organisation`s IT infrastructure and context to recommend suitable emerging technologies

S5. Verbally present complex emerging technology concepts succinctly and clearly

Application of knowledge and skills:

A1. Prepare a business model for an organisation using diverse emerging technologies, that is compatible with global sustainability goals.

Course Content:

Topics may include:

- Introduction and historical context of Emerging Technologies
- Business models, Competition and Industry analyses in the Information Age
- Data, information, knowledge and databases
- Emerging Technologies including Artificial Intelligence, Data Analytics and Internet of Things, Cloud/Edge, Drones, 5G, 6G
- eBusiness, eCommerce and fast fashion
- Technology life cycles and strategic planning
- The relationship between current technologies including ERP, CRM and Collaborative Systems with Emerging Technologies

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 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 1 Interpersonal	Students will demonstrate the ability to effectively communicate, interact and work with others both individually and in groups. Students will be required to display skills in-person and/or online in: • Using effective verbal and non-verbal communication • Listening for meaning and influencing via active listening • Showing empathy for others • Negotiating and demonstrating conflict resolution skills • Working respectfully in cross-cultural and diverse teams.	Not applicable	Not applicable
FEDTASK 2 Leadership	Students will demonstrate the ability to apply professional skills and behaviours in leading others. Students will be required to display skills in: • Creating a collegial environment • Showing self -awareness and the ability to self-reflect • Inspiring and convincing others • Making informed decisions • Displaying initiative	Not applicable	Not applicable
FEDTASK 3 Critical Thinking and Creativity	Students will demonstrate an ability to work in complexity and ambiguity using the imagination to create new ideas. Students will be required to display skills in: • Reflecting critically • Evaluating ideas, concepts and information • Considering alternative perspectives to refine ideas • Challenging conventional thinking to clarify concepts • Forming creative solutions in problem solving	A1	AT1
FEDTASK 4 Digital Literacy	Students will demonstrate the ability to work fluently across a range of tools, platforms and applications to achieve a range of tasks. Students will be required to display skills in: • Finding, evaluating, managing, curating, organising and sharing digital information • Collating, managing, accessing and using digital data securely • Receiving and responding to messages in a range of digital media • Contributing actively to digital teams and working groups • Participating in and benefiting from digital learning opportunities	S4	AT2
FEDTASK 5 Sustainable and Ethical Mindset	Students will demonstrate the ability to consider and assess the consequences and impact of ideas and actions in enacting ethical and sustainable decisions. Students will be required to display skills in: • Making informed judgments that consider the impact of devising solutions in global economic environmental and societal contexts • Committing to social responsibility as a professional and a citizen • Evaluating ethical, socially responsible and/or sustainable challenges and generating and articulating responses • Embracing lifelong, life-wide and life-deep learning to be open to diverse others • Implementing required actions to foster sustainability in their professional and personal life.	A1, K5	AT1, AT2

Learning Task and Assessment:

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
A1	Construct a report on the analysis of a real world business, its model and existing technologies, and recommendations for the use of emerging technologies	Assignments	50-80%
K1-6, S1-4	Practical and laboratory exercises	Practice laboratory exercises	10-30%
K5, K6, S1, S5	Presentation of findings of the selected business's emerging technology report	Presentation	10-30%

Adopted Reference Style:

APA

Refer to the library website for more information

Fed Cite - referencing tool