DIGITAL TECHNOLOGIES: KNOWLEDGE OF DIGITAL INFORMATION MANAGEMENT

Knowledge of digital information management focuses on how information is managed at both an individual user level and with shared information within an organisation. Initially students learn about basic concepts of information management in relation to producing digital information outcomes. This includes understanding the key features of operating systems and common application software, file management procedures, and ethical issues related to the management of information. Students progress to learning about complex concepts of information systems within organisations. This includes explaining the interaction between the main components of an information system used in an organisation, discussing the nature and value of information to an organisation, discussing the characteristics of good information, and end-user considerations, and discussing the implications of security management for information systems.

	LEVEL 6	LEVEL 7	LEVEL 8
LO	*Demonstrate understanding of basic digital information management tools and systems*	*Demonstrate understanding of advanced digital information management tools and systems*	*Demonstrate understanding of complex concepts of information systems in an organisation*
TEACHER GUIDANCE	To support students to develop understandings about basic digital information management tools and systems at level 6, teachers could: • Provide students with opportunities to explain how application software and operating system software interact to manage information. • Provide students with a way of selecting and justifying the selection of application software to perform a task to manage information. • Provide students with opportunities to explain the purpose and conventions of file management procedures and the use of storage devices. • Provide students with opportunities to compare and contrast the use of different file types for different purposes • Provide students with opportunities to describe ethical issues related to management of information. • Guide students on how to prepare reports including ways to structure a report and literacy strategies to support report writing in a way that will allow students to identify, describe, explain, justify, and compare and contrast. • Provide opportunities for students to practice report writing including acknowledging sources and bibliographies.	To support students to develop understandings about advanced digital information management tools and systems at level 7, teachers could: • Guide students on how to research the information management issues related to shared information within an organisation. • Provide students with opportunities to explain file management considerations related to shared information and the related procedures and conventions for privacy and permission. • Provide students with opportunities to discuss ethical and legal issues related to shared information within an organisation. • Provide students with opportunities to evaluate backup procedures and conventions for information systems within an organisation. • Provide students with opportunities to evaluate the effectiveness of information systems for managing shared information within an organisation. • Ensure students understand the requirement at this level to look at information management issues related to shared information and information systems within an organisation • Ensure students have access to a suitable organisation to use for the case study. • Support students to prepare reports including ways to structure a report and literacy strategies to support report writing in a way that will allow students to describe, explain, discuss, and evaluate. • Ensure students have opportunities to practice report writing including acknowledging sources and bibliographies.	To support students to develop understandings about complex concepts of information systems in an organisation, at level 8, teachers could: • Guide students on how to research the information systems within an organisation. • Provide students with opportunities to explain the interaction between the main components (hardware, software, data, procedures, and people) of an information system used in an organisation. • Provide students with opportunities to discuss the nature and value of information to an organisation including being able to discuss the differences between data, information, and knowledge. • Provide students with opportunities to discuss the characteristics of 'good' information (such as accuracy, timeliness, relevance, appropriate quantity, economical etc) and evaluate the trade-offs between the characteristics of good information in an organisation. • Provide students with opportunities to discuss the impact on, and influence of, end-user considerations (such as user consultation, ease-of-use, user interface design, work procedures, implementation issues, training) on information systems in an organisation. • Provide students the opportunity to discuss the implications of security management for information systems (including evaluating trade-offs between security management and end-user considerations within an organisation). • Ensure students understand the requirement at this level to look at an information systems within an organisation, and that when looking at an information system they need to look at hardware, software, data, procedures, and people. • Ensure students have access to a suitable organisation to use for the case study. • Support students to prepare reports including ways to structure a report, and literacy strategies to support report writing in a way that will allow students to explain, discuss, and evaluate. • Ensure students have opportunities to practice report writing including acknowledging sources and bibliographies.
INDICATORS	Students can: • identify and describe key features of operating systems and common application software as they relate to the management of information • identify and describe file management procedures, and explain the purpose and conventions of file management procedures and use of storage devices • describe ethical issues related to management of information (eg, copyright, privacy, file security, appropriateness of the material in its context) • explain the purpose of operating systems and the purposes of common application software to manage information and how application software and operating system software interact to manage information • justify the selection of application software to perform a task to manage information • compare and contrast the use of different file types for different purposes (eg, pdf versus doc, jpeg versus bmp).	Students can: • explain the file management considerations related to shared information • explain the role of an information system for managing shared information within an organisation, and discuss the advantages and disadvantages of an information system for managing shared information within an organisation • identify the input, storage, retrieval and manipulation of data within an information system • discuss ethical and legal issues related to shared information within an organisation and the implications for procedures and conventions for privacy and permission • explain the implications of back up procedures and conventions for information systems within an organisation, and evaluate the backup procedures and conventions for information systems used within an organisation • evaluate procedures and conventions for privacy and permissions used within an organisation • evaluate the effectiveness of an information system for managing shared information within an organisation.	Students can: • explain the interaction between the main components of an information system used in an organisation • explain the nature of information and discuss: differences between data, information and knowledge; the nature and value of information in an organisation; and how information systems add value to an organisation • discuss the characteristics of 'good' information, and evaluate the trade-offs between the characteristics of good information (eg, timeliness vs. accuracy) in an organisation • explain the importance of end-user considerations in information systems, and discuss the impact on and influence of end-user considerations on information systems in an organisation • explain security management for information systems and discuss the implications of security management for information systems • evaluate the trade-offs between security management in an information system and end-user considerations in an organisation.
AS	**AS91070 Digital Technologies 1.40** *Demonstrate understanding of basic concepts of information management*	**AS91367 Digital Technologies 2.40** *Demonstrate understanding of advanced concepts relating to managing shared information within information systems*	**AS91632 Digital Technologies 3.40** *Demonstrate understanding of complex concepts of information systems in an organisation*
	Level 1 Digital Technologies standards & assessment resources	Level 2 Digital Technologies standards & assessment resources	Level 3 Technology achievement standards & assessment resources DRAFT