

Applied Information Technology

Scope and sequence

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Applied Information Technology—Scope and sequence of content

Accredited Course		UNIT PA pp. 10–11	UNIT PB pp. 12–13	UNIT 1A pp. 14–15	UNIT 1B pp. 16–17	UNIT 1C pp. 18–19	UNIT 1D pp. 20–21
Course Content (pp. 4–5)		Personal information communication technologies	Personal home office	Personal communication	Work readiness	Personal information and communication technologies	Community information and communication technologies
Social Implications and Trends	The impact of ICT on individuals, communities and environments	<ul style="list-style-type: none"> Occupational Safety and Health issues associated with the use of computers and personal technology e.g. safe use of power, time spent using technology brief overview of the appropriate use of digital data e.g. the internet. 	<ul style="list-style-type: none"> brief overview of the impact of personal ICT use e.g. music downloads, copyright considerations for image use brief overview of responsible environmental use of ICT e.g. safe disposal of batteries and personal technologies, storage of software and hardware brief overview of consequences for individuals who access inappropriate digital data. 	<ul style="list-style-type: none"> Occupational Safety and Health issues relating to the use of computers. 	<ul style="list-style-type: none"> health and safety issues relating to ICT use in the workplace impact of ICT use e.g. copyright considerations the effect of ICT use on the environment. 	<ul style="list-style-type: none"> changes in ICT and how the rate of change affects personal values, productivity, communication patterns and lifestyles influence of ICT use on behaviour, personal opinions or decisions, attitudes and relationships. 	<ul style="list-style-type: none"> impact of ICT use on work and communication patterns within the small business or community environment impact of ICT use on the lifestyle of the individual, their work values and productivity issues advantages and disadvantages of ICT within small business and the community.
	Values, ethics and inclusivity	<ul style="list-style-type: none"> responsibilities and basic personal safety of ICT users to maintain privacy of information e.g. secure and responsible web use, secure log on. 	<ul style="list-style-type: none"> responsibilities of maintaining privacy when using technology e.g. storing files in personal folders simple methods of responsible and careful use of personal technology e.g. secure passwords, access to a network. 	<ul style="list-style-type: none"> responsibilities of ICT users to maintain privacy of information. 	<ul style="list-style-type: none"> responsibility for access, availability, privacy and security of information. 	<ul style="list-style-type: none"> individual rights for privacy responsibility and safeguards required for the access, availability and security of information and potential for misuse within a personal context. 	<ul style="list-style-type: none"> the use of online solutions e.g. email individual and community rights for privacy responsibility for access, availability and security of information and their potential misuse.
	Past and emerging trends in ICT	<ul style="list-style-type: none"> brief overview of new developments in ICT for personal use e.g. mobile phone, Personal Digital Assistant, iPods, digital camera brief overview of choices available for personal ICT use and how to access those choices e.g. matching 	<ul style="list-style-type: none"> brief overview of the universal design features in ICT e.g. text to speech applications, use of accessibility options, graphics. 	<ul style="list-style-type: none"> identification of new developments in ICT for personal use impact of new ICT developments on users. 	<ul style="list-style-type: none"> identification of changes occurring in ICT and the influence on a work environment. 	<ul style="list-style-type: none"> introduction to major trends in ICT for personal use impact and influence of new trends on decision-making and choices. 	<ul style="list-style-type: none"> emergence of online solutions e.g. email, wiki, blog effects of new trends on information publication.

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Course Content (pp. 4–5)	Personal information communication technologies	Personal home office	Personal communication	Work readiness	Personal information and communication technologies	Community information and communication technologies
	individual ability with technology and resources e.g. establishing mobile phone plans.					

Accredited Course		UNIT 2A pp. 22–24	UNIT 2B pp. 25–27	UNIT 3A pp. 28–30	UNIT 3B pp.31–32
Course Content (pp. 4–5)		Media information and communication technologies	Information and communication technologies in business	Evolving information and communication technologies	Information and communication technologies in industry
Social implications and trends	The impact of ICT on individuals, communities and environments	<ul style="list-style-type: none"> describe the impact on target audiences while considering inclusivity i.e. sight impaired, disabled, gender, age explain the impact of ICT on changing work expectations e.g. longer and flexible hours in the workplace discuss environmental concerns <ul style="list-style-type: none"> safe disposal of computers benefits of using digital media compared to print media, e.g. emails replacing letters, digital photos replacing film photos. 	<ul style="list-style-type: none"> describe the impacts of business technologies on work expectations and lifestyles <ul style="list-style-type: none"> mobile technology devices on business e.g. notebooks, mobile and smart phones, PDA's 24/7 communication expectations analyse the impacts and effects of local and national ICT structures on the flow of information to specific communities and environments <ul style="list-style-type: none"> mobile phone networks internet/broadband wireless technologies Internet cafes and libraries. 	<ul style="list-style-type: none"> examine the impacts on developers of new technologies and the choices that users make in relation to: <ul style="list-style-type: none"> behaviour and relationships of individuals <ul style="list-style-type: none"> Virtual Worlds e.g. Second Life, the SIMs Role Playing Games e.g. World of Warcraft the physical environment <ul style="list-style-type: none"> industry disposal of old technology climate change sustainable use of paper based products community <ul style="list-style-type: none"> satellite technology e.g. Google earth, GPS online applications i.e. Web2/3 finance and the economy <ul style="list-style-type: none"> online auction e.g. Ebay online banking live feeds from stock exchange online retail. 	<ul style="list-style-type: none"> discuss the impacts of ICT on industries in the community <ul style="list-style-type: none"> improved communications increased productivity efficient production processes analyse the impacts of ICT on individuals working within industries <ul style="list-style-type: none"> improved work habits and communications wider employment location choices e.g. telecommuting.
	Values, ethics and inclusivity	<ul style="list-style-type: none"> basic understanding of ethical issues relating to the production of media products <ul style="list-style-type: none"> privacy piracy intellectual property copyright plagiarism examines the term digital divide. 	<ul style="list-style-type: none"> examine ethical issues related to the use of technologies within business: <ul style="list-style-type: none"> identity theft e.g. phishing, pharming piracy i.e. software breach of intellectual property i.e. unauthorised use of programming code breach of copyright i.e. illegal file sharing, bootleg recordings, screener DVD's, plagiarism security issues i.e. hackers discuss the impacts of the global digital divide on business e.g. e-commerce—paying bills online, online shopping. 	<ul style="list-style-type: none"> investigate changing societal values and ethics in the use of ICT e.g. MySpace, Facebook discuss the implications of identity theft identify the need for inclusivity in the design of ICT products and services e.g. monitors for sight impaired, use of icons, subtitles for deaf, equipment for the handicapped discuss digital divide i.e. the availability of ICT resources to both wealthy and poor sectors of the economy analyse the ethics of employer and employee relationships in regards to the appropriate use of ICT technologies in the workplace <ul style="list-style-type: none"> appropriate user policies employer's monitoring of work emails, internet access and computer use 	<ul style="list-style-type: none"> discuss the impact of access to global markets on the ability to purchase and use of ICT products <ul style="list-style-type: none"> world-wide access to products and web sites international news sites online censorship of information investigate end user expectations in differing cultures e.g. interpretation and use of language and images in websites analyses ethical issues and legislation in industry <ul style="list-style-type: none"> ethics in ICT in an industry context i.e. Code of Conduct intellectual property i.e. patents, trade marks, registered designs.

Accredited Course	UNIT 2A pp. 22–24	UNIT 2B pp. 25–27	UNIT 3A pp. 28–30	UNIT 3B pp.31–32
Course Content (pp. 4–5)	Media information and communication technologies	Information and communication technologies in business	Evolving information and communication technologies	Information and communication technologies in industry
			<ul style="list-style-type: none"> ▪ security of information and protective measures i.e. Net Alert, cyber stalking, cyber bullying • appropriate legislation i.e. Spam Act, Copyright Act, Privacy Act. 	
Past and emerging trends in ICT	<ul style="list-style-type: none"> • explore multimedia trends and developments i.e. virtual reality, voice recognition, podcasting • discuss the convergence of digital media forms <ul style="list-style-type: none"> ▪ PDAs ▪ mobile phones—internet access, GPS and TV access • describe the dependency of society upon electronic and visual communication <ul style="list-style-type: none"> ▪ email, online chatting, social networking ▪ digital storage of data—music, photos. 	<ul style="list-style-type: none"> • examines the emergence of electronic commerce and global networks <ul style="list-style-type: none"> ▪ banking—past (counter banking) to current (online banking) ▪ paying bills—past (paying by cheque) to current (BPay) ▪ business accounts—past (account ledgers and books) to current (accounting software) • investigate effects of business globalisation <ul style="list-style-type: none"> ▪ design and manufacture of information products in different countries ▪ outsourcing of ICT products—define, examples, advantages/disadvantages. 	<ul style="list-style-type: none"> • explores present and emerging ICT trends e.g. digital video and sound, online services — sport , music, training and education, news and advertising, digital maps • investigates the convergence of multimedia trends and new developments in technology e.g. haptic technology, human kinetics, robotics. 	<ul style="list-style-type: none"> • analyse the impact of current and emerging trends on: <ul style="list-style-type: none"> ▪ global market forces—international communications via video conferencing ▪ lifestyle choices—remote access to work sites, flexible work hours ▪ industry shop ‘face’ — online presentation via web sites, cross web site advertising.

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Course Content (pp. 4–5)		Personal information communication technologies	Personal home office	Personal communication	Work readiness	Personal information and communication technologies	Community information and communication technologies
Hardware and software	Hardware components and functions	<ul style="list-style-type: none"> recognition of the basic components of personal technology systems e.g. iPods, computer, mobile phone, charger, batteries identification of peripheral devices such as personal keyboards, trackballs, mouse, camera simple techniques for assessing individual ICT needs e.g. larger keyboard, vertical mouse, portable vs desktop computer. 	<ul style="list-style-type: none"> recognition and labelling of basic functions and components of personal office computer hardware systems e.g. necessity of modem for internet access, USB ports and cables for connecting devices, photocopier, scanner identification of common peripheral devices for personal home office use simple problem-solving techniques e.g. access to power, available support personnel, following troubleshooting checklists. 	<ul style="list-style-type: none"> basic identification of the components of a computer system common peripheral devices. 	<ul style="list-style-type: none"> basic functions and components of computer hardware systems common peripheral devices (e.g. scanner and printer) for work use simple networking equipment for work productivity to connect to the internet. 	<ul style="list-style-type: none"> hardware requirements for personal computer systems including peripheral devices input, output, memory/storage, communication and processing components interaction of components and their function. 	<ul style="list-style-type: none"> hardware requirements for small business and community computer systems including simple networking and peripheral devices e.g. projectors introductory concepts and terminology associated with hardware components interaction of the components: role and purpose, characteristics, capabilities and limitations.
	Applications and systems software	<ul style="list-style-type: none"> matching commonly used application software and their appropriateness when targeting a different audience e.g. personal communication software, email and word processing, informal and formal text and genres. 	<ul style="list-style-type: none"> basic identification of different software used in a personal home office environment basic use of software applications for personal technology use in a personal home office environment e.g. email, text messaging, inserting an image, MSN. 	<ul style="list-style-type: none"> differentiation between operating and application software identification of different types of common applications and their uses. 	<ul style="list-style-type: none"> basic exploration of different operating systems software for a work environment applications software appropriate to tasks in a work environment. 	<ul style="list-style-type: none"> systems software and the operating system used in a personal computer commonly used applications software, such as word processing, presentation and desktop publishing, graphics, spreadsheet, graphing, email and internet applications. 	<ul style="list-style-type: none"> operating systems software required for small business or community systems applications software appropriate to tasks in a small business or community environment email communications and computer control of simple devices and processes e.g. use of calendar.

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Course Content (pp. 4–5)	Personal information communication technologies	Personal home office	Personal communication	Work readiness	Personal information and communication technologies	Community information and communication technologies
Design and acquisition of hardware and software	<ul style="list-style-type: none"> • simple physical care of technology systems e.g. closing applications, proximity of liquids • brief overview of purchasing choices matching software applications and hardware to personal needs. 	<ul style="list-style-type: none"> • basic identification of the components necessary to assemble a personal home office computer system • brief overview of the choices available when considering hardware and software for personal use in the home office e.g. economic resources. 	<ul style="list-style-type: none"> • simple care of a computer system e.g. dust removal • locate suitable places to purchase computer systems and components for personal use. 	<ul style="list-style-type: none"> • basic procedures involved in the assembly, operation and maintenance of a simple work computer system • identification of basic factors to consider when acquiring hardware and software. 	<ul style="list-style-type: none"> • selection, configuration and maintenance of hardware and software components to form a suitable personal computer system e.g. preventative maintenance: firewall, trojan removal, antivirus installation • comparison of the costs and elements of personal systems available in the marketplace • identification of factors to consider when acquiring hardware and software. 	<ul style="list-style-type: none"> • selection, configuration and maintenance of hardware and software components to form a small business or community computer system e.g. malware spybots • typical methods of acquisition of hardware and software for small business or community organisation • licensing requirements of common software applications and the consequences for illegal acquisition.

Accredited Course		UNIT 2A pp. 22–24	UNIT 2B pp. 25–27	UNIT 3A pp. 28–30	UNIT 3B pp.31–32
Course Content (pp. 4–5)		Media information and communication technologies	Information and communication technologies in business	Evolving information and communication technologies	Information and communication technologies in industry
Hardware and software	Hardware components and functions	<ul style="list-style-type: none"> introduction to networking concepts <ul style="list-style-type: none"> file sharing/resource sharing physical and logical connections define the following peripheral devices and their functions <ul style="list-style-type: none"> scanners printers digital cameras video cameras describe the components of a multimedia computer system: <ul style="list-style-type: none"> processing (central processing unit) input devices i.e. mouse, keyboard output devices i.e. monitor, printer memory/storage <ul style="list-style-type: none"> primary i.e. RAM, ROM, cache secondary i.e. flash, magnetic communication devices describe troubleshooting techniques using support documents and/or online support facilities i.e. faulty monitor, computer not powering on, printers not working. 	<ul style="list-style-type: none"> define networking concepts: <ul style="list-style-type: none"> physical transmission media (network cable and wireless connection) basic network components e.g. server, router, modem, network interface card, switch security of networks i.e. firewalls, passwords describe connection issues relating to the following components: <ul style="list-style-type: none"> input / output devices e.g. Bluetooth, USB, wireless, infrared communication devices e.g. PDA, mobile phone. 	<ul style="list-style-type: none"> investigate and compare different types of computer platforms i.e. MS Windows and MacOS or Linux describe current hardware specifications of typical small-scale multimedia business computer systems for different purposes <ul style="list-style-type: none"> CPU, primary and secondary memory, graphics output, sound/output, visual output explain the function of specialised peripheral devices e.g. graphics tablet, interactive whiteboard, video capture cards investigate help procedures and other support hardware/software functionality e.g. forums, bulletin boards, on line tutors, live chats, video conferencing. 	<ul style="list-style-type: none"> identify and describe the components, concepts and terminology for the establishment of a small-scale networked computer hardware system <ul style="list-style-type: none"> network topologies for LANs (star, wireless) network devices (network interface card, switch, router, modem) protocols (TCP/IP, HTTP, HTTPS, SMTP, WAP) transmission media (coaxial, twisted pair, optical, wireless) describe the major factors affecting the functioning of ICT equipment within a networked environment e.g. transmission rates, bandwidth limitations knowledge of peripheral devices suited to selected industry requirements e.g. computer aided manufacturing (CAM) lathes and devices, high speed photography for movement analysis.
	Applications and systems software	<ul style="list-style-type: none"> discuss system software requirements: <ul style="list-style-type: none"> operating systems i.e. Windows, MacOS, Linux utility software i.e. anti-virus, disk fragmenter, compression, encryption diagnostic software i.e. scan disk introduction to the use of common media and ICT software for: <ul style="list-style-type: none"> animation image manipulation presentation web authoring audio video discuss troubleshooting using support documents and/or online support facilities – searching for lost files, repairing applications including reinstallation. 	<ul style="list-style-type: none"> describe the application/use of common ICT business software including descriptions, examples and use of: <ul style="list-style-type: none"> personal information managers i.e. Outlook, Lotus Notes presentation software for business word processing simple spreadsheets — basic formulas and charting flat file databases business Office Suites i.e. MS Office, Open Office online office applications i.e. Google applications publishing e.g. Adobe suite online forms for data collection. 	<ul style="list-style-type: none"> describe the efficient operation and maintenance of system utility tools and accessories <ul style="list-style-type: none"> disk cleanup tools i.e., cleanup temporary files, registry files, internet cache disk backup tools disk fragmentation anti malware/ virus/ spam/ spyware use and manipulate application software to combine media to create information products e.g. animation, audio, image manipulation. 	<ul style="list-style-type: none"> explore skills and techniques required to use specialised application packages relevant to selected business/industry e.g. movement analysis software, business web sites, 3D modelling, business desktop publishing use techniques and skills to ensure smooth operation of software applications.

Accredited Course	UNIT 2A pp. 22–24	UNIT 2B pp. 25–27	UNIT 3A pp. 28–30	UNIT 3B pp.31–32
Course Content (pp. 4–5)	Media information and communication technologies	Information and communication technologies in business	Evolving information and communication technologies	Information and communication technologies in industry
Design and acquisition of hardware and software	<ul style="list-style-type: none"> • explain the following factors when purchasing/acquiring hardware/software solutions to suit a media rich environment <ul style="list-style-type: none"> ▪ functions of hardware and software—does the hardware and software meet your requirements? ▪ fundamental technical capabilities of hardware and software - can the hardware meet the minimum requirements of the software? ▪ output quality—does the software give the desired output? ▪ cost of hardware and software—is the cost within budget? ▪ ease of use of software and hardware—who will use the software/hardware? What skills will they need to learn? 	<ul style="list-style-type: none"> • introduction to the following factors when purchasing/acquiring hardware/software in a business environment <ul style="list-style-type: none"> ▪ cost versus benefits in a business environment ▪ ergonomic requirements e.g. workstations. Does the equipment meet occupational health and safety requirements? ▪ legal acquisition of hardware/software i.e. license types: freeware, shareware, proprietary—have you purchased a legal copy/licence of the software? ▪ warranty and technical support. 	<ul style="list-style-type: none"> • explain the role and purpose of benchmarking in relation to the design and acquisition hardware and software • describe criteria when selecting hardware and software for a specified purpose including the minimum hardware requirements to run software • analyse the compatibility issues of running the latest software on current hardware. 	<ul style="list-style-type: none"> • compare and analyse similar software applications considering: <ul style="list-style-type: none"> ▪ user interface ▪ functions ▪ technical capabilities ▪ ease of use • investigate the constraints associated with the acquisition and installation of a range of hardware components—video cards, monitors, • discuss the use of service level agreements and outsourcing to meet business or industry requirements.

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Course Content (pp. 4–5)		Personal information communication technologies	Personal home office	Personal communication	Work readiness	Personal information and communication technologies	Community information and communication technologies
Digital data and information	The nature, forms and transfer of digital data	<ul style="list-style-type: none"> • use of simple functions to enhance personal applications e.g. insert personal photos, voice recording • simple ICT skills and terminology e.g. operation of a mouse, opening and closing relevant software applications, use of email. 	<ul style="list-style-type: none"> • simple techniques for the basic collection and appropriate storage of personal data e.g. document naming and placement for ease of retrieval • brief overview of regular file formats for storage of personal data • simple techniques to assess the reliability and accuracy of data e.g. stability of source, date last updated, publication date. 	<ul style="list-style-type: none"> • use of basic formatting functions to enhance the appeal of the design • common file formats. 	<ul style="list-style-type: none"> • basic skills and processes required to use, collect and store data appropriately • common file formats for data used • introduction to accuracy and reliability of sources of data. 	<ul style="list-style-type: none"> • skills, techniques and processes used to collect, evaluate and store data from a range of sources e.g. traditional and digital • data file formats and their impact on the access, transfer or distribution of data • accuracy, reliability, and validity of sources of data. 	<ul style="list-style-type: none"> • skills, techniques and processes associated with the capture, storage and transfer of digital data from a range of sources • data file formats and file sizes and their impact on the access, transfer or distribution of data • accuracy, reliability, validity and stability of sources of data • introduction to the use of online data and factors or constraints such as size, time, cost, locality, access and availability.
	Processing and managing data	<ul style="list-style-type: none"> • simple methods of data organisation using visual representations e.g. files and folders with image icon • awareness of types of data stored and the reasons for storage e.g. storage and retrieval of documents and photos • simple search strategies to locate information with assistance e.g. identify search location bar, use key search words. 	<ul style="list-style-type: none"> • simple file and folder organisation e.g. folders with symbols or images to assist with identification • brief overview of the effect of data manipulation e.g. music and video play lists, image collages. 	<ul style="list-style-type: none"> • simple data organisation methods e.g. files and folders • location of information using simple search strategies. 	<ul style="list-style-type: none"> • data organisation methods e.g. files, folders version control • basic skills to manipulate and transform data e.g. image manipulation. 	<ul style="list-style-type: none"> • procedures to manage personal digital resources • search strategies for sourcing data • development of specific skills to manipulate and transform data. 	<ul style="list-style-type: none"> • characteristics of information produced for different purposes and the procedures to record, store, search, retrieve, backup and archive data • specific skills to manipulate and transform data as information e.g. production of reports and charts.

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Creative application of information design principles	<ul style="list-style-type: none"> • identification of functional information products e.g. shopping lists, forms • use of simple techniques to assess usability of personal technology e.g. display and keypad size required for mobile phone. 	<ul style="list-style-type: none"> • basic use of commonly available applications to present personal information e.g. PowerPoint and Word with images, sound and voice files inserted. 	<ul style="list-style-type: none"> • identification that information products are for a purpose and an intended audience • introduction to simple information design principles • use of pre-defined criteria to evaluate the effectiveness of the design and output. 	<ul style="list-style-type: none"> • use of appropriate application software to design, create, edit and present information products for an intended audience • common information design elements and principles. 	<ul style="list-style-type: none"> • relationship between the intended audience, the design and the final presentation of information • application of principles and elements of information design (purpose, audience and client specifications) to the development of information products • identification of criteria for evaluating the effectiveness of the design and output. 	<ul style="list-style-type: none"> • use of ICT design principles and elements to create, edit and present information for a specific purpose, audience and client specifications • introduction to the characteristics of information including common formats, preferred conventions and simple techniques for navigating information • introduction to publishing options, media and formats • techniques used for representing the design of solutions and the criteria for evaluating the effectiveness of information output. 	

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Course Content (pp. 4–5)		Media information and communication technologies	Information and communication technologies in business	Evolving information and communication technologies	Information and communication technologies in industry
Digital data and information	The nature, forms and transfer of digital data	<ul style="list-style-type: none"> discuss the features of and differences between various file types used in a media environment—graphics, audio and video <ul style="list-style-type: none"> file format and size compression versus quality of data transferability between applications transfer over networks—email, internet, intranet. 	<ul style="list-style-type: none"> investigate various solutions for business documents used in print and online business environments: <ul style="list-style-type: none"> transfer of data files between ICT environments using email, CD/DVD ROMS, flash drives file compression, conversion and size e.g. lossy, lossless, zip security of data e.g. pdf and flash documents introduction to encryption including the use of public and private keys. 	<ul style="list-style-type: none"> discuss the impact and use of different file formats on the transfer or distribution of data explore the impact that communication connections (wireless, cable, satellite) have on: <ul style="list-style-type: none"> file types transfer of data i.e. cost, size interoperability, location, access, availability compare network bandwidth requirements for storage and retrieval of various file sizes. 	<ul style="list-style-type: none"> issues related to rapid transfer of large volumes of data e.g. streaming media, outside broadcasts: <ul style="list-style-type: none"> consider the intended audience discuss the technologies required to organise, process, download, upload and store the data compare the associated factors and constraints in relation to data transference with reference to size, time, cost, resources, security, locality, access, and availability explore industry standard equality assurance processes related to data accuracy, reliability and validity.
	Processing and managing data	<ul style="list-style-type: none"> demonstrates an awareness and use of the following when creating and storing various media solutions (graphics, audio and video): <ul style="list-style-type: none"> archiving, file naming (originals and edited) storage and retrieval of digital data i.e. file and folder management practices metadata i.e. html tags as used in web pages referencing and search strategies. 	<ul style="list-style-type: none"> incorporate input validation rules for text, numerical and image based data into business products manipulation of data e.g. saving data in various formats an introduction to knowledge management systems and their use in business e.g. capture sales data and produce reports input and extract data from a data store (database, Information Management system, email system). 	<ul style="list-style-type: none"> demonstrate techniques and processes relating to data in a multimedia environment: <ul style="list-style-type: none"> sourcing, organising, processing, managing and storing data ensuring the accuracy, reliability and validity of the data including data validation techniques including data validation techniques minimisation of threats to the integrity and security of data by using passwords, firewalls, encryption, anti-virus software. 	<ul style="list-style-type: none"> investigate how industry manages data including: <ul style="list-style-type: none"> managing security concerns i.e. disaster recovery plan, biometrics backup techniques and archiving of data storage of data i.e. data warehouses, data mining and data marts online data management e.g. call centres based in overseas countries. discuss the processing of industry data while considering: <ul style="list-style-type: none"> bandwidth limitations of networks compression of data files encryption methods — data encryption keys digital signatures.

Accredited Course	UNIT 2A pp. 22–24	UNIT 2B pp. 25–27	UNIT 3A pp. 28–30	UNIT 3B pp.31–32
Course Content (pp. 4–5)	Media information and communication technologies	Information and communication technologies in business	Evolving information and communication technologies	Information and communication technologies in industry
<p>Creative application of information design principles</p>	<ul style="list-style-type: none"> • define and apply information design principles in the creation of media related technology products considering: <ul style="list-style-type: none"> ▪ a specified target audience including: <ul style="list-style-type: none"> ○ purpose ○ content ○ navigation structure ○ interface design—aesthetics ▪ creative design principles including: <ul style="list-style-type: none"> ○ balance ○ proportion ○ unity ○ harmony ▪ elements of design including: <ul style="list-style-type: none"> ○ space ○ colour ○ alignment ○ position ○ form. 	<ul style="list-style-type: none"> • define and apply information design principles in the creation of business related technology products considering: <ul style="list-style-type: none"> ▪ a specified target audience including: <ul style="list-style-type: none"> ○ purpose ○ presentation medium e.g. poster, web site, brochure <ul style="list-style-type: none"> – content – aesthetics ▪ creative design principles including: <ul style="list-style-type: none"> ○ balance ○ proportion ○ dominance ○ unity ▪ elements of design including: <ul style="list-style-type: none"> ○ typography—font types, alignment ○ texture ○ colour—harmony, contrast ○ white spaces ○ shape. 	<ul style="list-style-type: none"> • critically evaluate and apply information design principles in the creation of evolving media related technology products considering: <ul style="list-style-type: none"> ▪ a specified target audience including: <ul style="list-style-type: none"> ○ purpose ○ presentation medium ○ parameters of design ○ content ○ navigation structure ○ interface ○ relevant language and terminology • creative design principles including: <ul style="list-style-type: none"> ▪ balance ▪ rhythm ▪ proportion ▪ dominance ▪ unity ▪ harmony ▪ emphasis • elements of design including: <ul style="list-style-type: none"> ▪ focus point ▪ contrast ▪ alignment ▪ position ▪ line ▪ texture ▪ colour—harmony, spaces ▪ typography ▪ pattern ▪ movement. 	<ul style="list-style-type: none"> • apply information design principles in the creation and promotion of a corporate identity considering <ul style="list-style-type: none"> ▪ ICT solutions across a range of media to suit purpose and intended meaning <ul style="list-style-type: none"> ○ inclusivity ○ usability ○ currency and accuracy of data ▪ evaluation of the effectiveness of the ICT solution against the design criteria.

Accredited Course		UNIT PA pp. 10–11	UNIT PB pp. 12–13	UNIT 1A pp. 14–15	UNIT 1B pp. 16–17	UNIT 1C pp. 18–19	UNIT 1D pp. 20–21
Course Content (pp. 4–5)		Personal information communication technologies	Personal home office	Personal communication	Work readiness	Personal information and communication technologies	Community information and communication technologies
Workplace, practices and career	Careers, work and jobs	<ul style="list-style-type: none"> brief overview of ICT skills required for personal use. 	<ul style="list-style-type: none"> identification of types of jobs that involve use of computers at home identification of technical support available for a personal home office e.g. help line from technology provider, public and private tuition. 	<ul style="list-style-type: none"> identification of work ICT requirements and responsibilities basic identification of skill requirement and pathways available for ICT careers. 	<ul style="list-style-type: none"> identification of pathways that provide relevant qualifications, experience and skills in ICT identification of work readiness skills required for individual work pathways. 	<ul style="list-style-type: none"> identification of pathways and opportunities within the personal environment that provide relevant qualifications, experience and skills in ICT use of ICT for personal use to support lifelong learning. 	<ul style="list-style-type: none"> identification of pathways, qualifications, experiences and personal attributes required for working within the ICT industry work structure options in the small business or community organisation marketplace e.g. working from home, 'tele-working', contract work.
	Work environments and legislation	<ul style="list-style-type: none"> brief overview of the consequences of relevant regulations that apply to safe use of personal ICT e.g. inappropriate use of websites, email and images, netiquette brief overview of the dangers of poor ergonomic practices e.g. seating, lighting, screen glare. 	<ul style="list-style-type: none"> introduction to the consequences of relevant regulations that apply to personal ICT use e.g. copyright acknowledgement, slander, bullying, privacy simple methods for safely using ICT introduction to some of the potential effects of ICT use on personal health and wellbeing. 	<ul style="list-style-type: none"> identification of legislation that impacts on the user in a personal context ergonomic practices for ICT users e.g. correct posture identification of environmental factors that affect ICT users. 	<ul style="list-style-type: none"> identification of legislation that affects the user of ICT in entering the work place principles, ergonomic practices and Occupational Safety and Health issues in relation to ICT good practice common environmental factors that affect ICT users. 	<ul style="list-style-type: none"> implications of legislation for users of ICT at school and home e.g. cyberbullying principles, ergonomic practices and critical factors that affect ICT users and their environment. 	<ul style="list-style-type: none"> identification of relevant legislation and legal, moral and social responsibilities of ICT users e.g. equal opportunity, anti-discrimination and codes of conduct for ICT use Occupational Safety and Health requirements, ergonomic practices and critical environmental factors economic effects of the implementation of ICT in a small business or community organisation.
	Technology processes in the workplace	<ul style="list-style-type: none"> simple problem-solving techniques for representing ideas. 	<ul style="list-style-type: none"> basic technology skills and terminology required to use equipment safely e.g. 'kill' switches for personal equipment, safe proximity, on/off. 	<ul style="list-style-type: none"> simple techniques for representing design solutions e.g. brainstorming and annotated diagrams basic technology skills required to use equipment safely. 	<ul style="list-style-type: none"> use of personnel, visual manuals or basic instructions to solve operational problems and make design decisions basic technology skills and terminology required to use equipment safely. 	<ul style="list-style-type: none"> application of ICT methodologies used for problem-solving simple techniques for representing the design of solutions e.g. design briefs, annotated diagrams and storyboards use of ICT to increase personal efficiency and quality of output. 	<ul style="list-style-type: none"> application of ICT problem-solving methodologies used in the small business or community organisation application of ICT to increase efficiency and quality e.g. organisational/time management skills, cooperative and collaborative teamwork, enterprise and creativity in the small business or community organisation.

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Course Content (pp. 4–5)		Media information and communication technologies	Information and communication technologies in business	Evolving information and communication technologies	Information and communication technologies in industry
Workplace, practices and career	Careers, work and jobs	<ul style="list-style-type: none"> investigation of multimedia related <ul style="list-style-type: none"> careers e.g. web designer, graphic designer, video editor, photographer training pathways e.g. TAFE, university qualifications. 	<ul style="list-style-type: none"> demonstrates an awareness of training opportunities in relevant business software investigation of alternative career pathways for business employment e.g. data entry and operator, digital accounts shows an understanding of multi-skilling. 	<ul style="list-style-type: none"> investigate qualifications and training related to evolving technology based employment opportunities discuss the impacts of ICT on future career opportunities e.g. job growth areas versus job loss/reductions. 	<ul style="list-style-type: none"> discuss appropriate industry qualifications e.g. MCP, CCNA, CNE discuss the potential development of new skills and qualifications that arise from the rapid expansion of ICT and globalisation e.g. web design skills, database skills.
	Work environments and legislation	<ul style="list-style-type: none"> introduction to and awareness of practices and legislation issues relating to: <ul style="list-style-type: none"> privacy of information including the Privacy Act (Australian) copyright e.g. Australian Copyright Act 1968. 	<ul style="list-style-type: none"> investigates the impact of ICT use within a business organisation <ul style="list-style-type: none"> ICT Code of conduct i.e. appropriate use of equipment and ethical use of company information, email and internet usage, proxy server logs introduction to company liability in terms of: <ul style="list-style-type: none"> Occupational Safety and Health employee privacy. 	<ul style="list-style-type: none"> discuss the impact of legislation affecting evolving technologies considering: <ul style="list-style-type: none"> copyright—fair dealing, moral rights Copyright Act intellectual property occupational, health and safety including the OHS Act. 	<ul style="list-style-type: none"> investigate changing work environments associated with a global economy e.g. international work opportunities, 'one job for life' theory, qualification recognition discuss relevant legislation affecting production in a global market e.g. visa restrictions, international copyright variations.
	Technology processes in the workplace	<ul style="list-style-type: none"> examine common workplace processes, including use of concept maps, proposals, research and storyboards explain the use of project teams i.e. team members working collaboratively in the same or different locations. 	<ul style="list-style-type: none"> analysis of client requirements and needs i.e. requirements analysis describes factors influencing teams in a business environment i.e. job security, gender bias, communication. 	<ul style="list-style-type: none"> use and describe common work processes, including use of detailed concept maps, proposals, research and storyboards in product development analysis of client requirements and needs i.e. requirements analysis explain the requirements of individuals or characteristics for the work environment e.g. working independently, cooperatively and collectively. 	<ul style="list-style-type: none"> describe strategies to maintain employees' skill levels i.e. on the job training, short courses in relevant software skilling, power users consider project management strategies to encourage flexibility, originality, and risk taking in ICT projects.