

# UNIT 2BAIT

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## Unit description

The unit description provides the focus for teaching the specific unit content.

The focus for this unit is **digital technologies in business**. Skills, principles and practices associated with various types of documents and communications are emphasised. Students identify the components and configuration of networks to meet the needs of a business. Students design digital solutions for clients being mindful of the various impacts of technologies within legal, ethical and social boundaries.

## Unit content

This unit includes knowledge, understanding and skills to the degree of complexity described below. This is the examinable content of the course.

### Managing data

#### Knowledge

- compression for transfer and display of data
  - purpose
  - lossy compression
  - lossless compression
  - file sizes
- techniques for file size minimisation
  - cropping
  - resampling
- optimisation of files for
  - digital or online
  - print
- online data management
- concept of cloud computing
- efficient operation and maintenance of data using system utility tools and accessories:
  - disk clean-up tools
  - deletion of temporary files/internet cache
  - disk fragmentation
  - anti-malware, virus, spam, spyware.

#### Skills

- use compression to optimise transfer of data
- use appropriate system utility tools as necessary
- data management
  - document version control
- use digital communications media.

### Impacts of technology

#### Knowledge

##### Legal

- Privacy Act 1988
  - collection of personal information
  - how personal information is used
  - access to personal information

- implications of identity theft
- safe disposal of data

#### Ethical

- digital divide issues
  - availability of digital resources
  - use of digital technologies
    - availability of web based applications

#### Social

- electronic commerce
  - implications of improved digital communications
  - 24/7 communications
  - online retail opportunities
- issues related to the dependency of society upon electronic and visual communication in business.

### Networks

#### Knowledge

- network topologies for Local Area Network (LANs)
  - wired star
  - wireless
  - client server
  - peer to peer
- network components for internet connection for a small business
  - server
  - router
  - Network Interface Card (NIC)
  - Switch
  - Modem
- networking
  - purpose
  - advantages
  - disadvantages
- transmission media
  - optic fibre
  - wired
  - wireless
  - transmission rates.

#### Skills

- design a suitable LAN topology for a small business.

### Application skills

#### Knowledge

- animation software
  - frame by frame
  - tweens
  - buttons
  - simple actions
    - stop
    - start
    - move object
- online collaboration
- audio
  - editing
  - converting
  - exporting web authoring
  - links
  - graphics

- templates
- files
  - Cascading Style Sheet (.css)
  - Hypertext Markup Language File (.htm/.html)
- responsive design.

### Skills

- use animation software
  - frame by frame
  - tweens
  - buttons
  - simple actions
    - stop
    - start
    - move object
- use web authoring
  - links
  - graphics
  - templates
  - files
    - Cascading Style Sheet (.css)
    - Hypertext Markup Language File (.htm/.html)
- apply a style guide
- create a navigation map
- edit audio files
- use multimedia applications to edit and create digital products.

## Project management

### Knowledge

- project management
  - plan of action
  - time management
  - resources
  - managing resources
  - evaluation.

### Skills

- apply project management techniques to meet client requirements
- apply a design process to create a digital product solution
- ensure the digital product solution meets user requirements.

## Assessment

The three types of assessment in the table below are consistent with the teaching and learning strategies considered to be the most supportive of student achievement of the outcomes in the Applied Information Technology course. The table provides details of the assessment type, examples of different ways that these assessment types can be applied and the weighting range for each assessment type.

Weighting Stage 2	Type of assessment
50%	<b>Production (Projects)</b> Students research ideas and processes to produce quality projects. Management of a range of production processes, evaluations and modifications should be undertaken as necessary. Students should be able to demonstrate competence in the use of digital technologies, skills and processes.
30–40%	<b>Response</b> Students apply their knowledge and skills in researching, analysing and responding to a series of stimuli or prompts. Students may also provide a response and/or analysis of digital technology products and/or trends.
10–20%	<b>Examination</b> Students apply their knowledge and skills using technical terminology to analyse, interpret and answer questions in examination settings. Types of questions include multiple choice, short answer, extended answer and production.