

UNIT 2AAIT

Unit description

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

The focus for this unit is **media information and communication technologies**. The emphasis is on the use of digital technologies to create and manipulate digital media. Students use a range of applications to create visual and audio communications. They examine trends in digital media transmissions and implications arising from the use of these technologies.

Unit content

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

Design concepts

Knowledge

- elements of design
 - line
 - shape
 - space
 - texture
 - colour
 - 3D form
 - tone
- design principles
 - balance
 - emphasis (contrast and proportion)
 - dominance
 - unity (proximity and repetition)
 - pattern
 - movement
- typography
 - typeface
 - size
 - alignment
 - format
 - spacing
- relationship between elements and principles of design
- layout and composition principles
 - reading gravity
 - rule of thirds
 - form of content
 - grid and alignment.

Skills

- identify and explain design principles and elements in existing works
- design development process
 - creation of accurate visuals/layouts
 - apply layout and composition principles

- apply elements and principles of design relevant to a particular task
- detailed annotations for designs
 - elements and principles of design
 - technical requirements
 - visual composition
 - grid and alignment
- modify project to meet a design need/consideration
 - apply layout grid and alignment.

Hardware

Knowledge

- hardware components of a computer system
 - Central Processing Unit (CPU)
 - purpose
 - types memory/storage
 - primary
 - secondary
 - peripheral devices
 - mobile devices
- operating system (OS) software for different applications
 - types
 - Windows
 - Mac OS
 - iOS
 - Android
 - Linux
 - Operating System (OS) functions
 - user interface
 - managing system resources
 - managing security and access rights
 - running applications
- software compatibility issues
 - running older software on current hardware
 - newer software running on older hardware.

Skills

- describe criteria when selecting hardware and software for a specified purpose including the minimum hardware requirements to run software.

Impacts of technology

Knowledge

Legal

- Copyright Act 1968
 - Fair Dealing
 - Private Use
 - Moral Rights

Ethical

- appropriate referencing techniques for digital publications
- acknowledgement of Intellectual Property owner

Social

- digital citizenship
 - responsible use of social networking
 - forms of cyber bullying
 - strategies to manage/limit cyber bullying
- addressing work/life balance issues

- social networking
 - types
 - features
- types of virtual communities
 - online chat rooms
 - virtual worlds
 - social network services.

Skills

- use appropriate referencing techniques for digital publications.

Application skills

Knowledge

- data organisation
 - common file formats for graphics and audio
 - vector graphics
 - Computer Graphics Metafile (cgm)
 - Scalable Vector Graphic (svg)
 - raster graphics
 - Bitmap Image File (.bmp)
 - Graphical Interchange Format File (.gif)
 - JPEG Image File (.jpg/.jpeg)
 - Tagged Image File (.tif)
 - audio
 - Moving Pictures Experts Group (.mp3)
 - WAVE (.wav)
 - Windows Media Audio File (.wma)
- application software management
 - installing
 - updating
- licences
 - open and closed source
 - proprietary
 - shareware
 - freeware
- spreadsheets
 - lookup tables
 - HLookup
 - VLookup
 - sort filters.

Skills

- use spreadsheets
 - lookup tables
 - HLookup
 - VLookup
 - sort filters
- apply appropriate file types
 - raster graphics
 - vector graphics
 - audio files.

Project Management

Knowledge

- project design process
 - product purpose and design criteria
 - target audience characteristics
 - project presentation medium
 - situation analysis

- style guide
- design plans
 - storyboard
 - thumbnails (hand/digital)
 - wireframes/sketches (hand/digital)
- evaluation criteria.

Skills

- use appropriate elements and principles of design
- apply a design process to create a digital product solution
- produce a formal report layout including an appendix and bibliography.

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%	Production (Projects) 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%	Response 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%	Examination 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.