IDMT

Information, Digital Media and Technology.

Coding, Gaming & Web Creation / Cyber Security & Support.

IVET's IDMT programs align with current industry advice and needs.

IVET offers two streams for students. The first is designed to offer a broad range of careers where base level IDMT skills will position them well to add immediate value to their employers or provide the required skills to aid future studies.

The second stream is specifically designed for students who have interest in Coding, Gaming and/or Web Creation. The program is specifically designed to ensure there is a broach range of skills in each of these areas to enable students to determine the specific pathway they are most interested in.

- A study score is available for the partial completion of the Certificate III in Information, Digital Media and Technology.
- Cyber Security electives can also be chosen, providing students a key skill identified by industry and the Australian Government as essential to many roles in the future. The Cyber Security units will aid students in understanding how to protect themselves and others online, providing great workplace skills, but also skills that can be applied by the students in their personal and family life.

Pathways

IDMT Generalist | **Coding, Gaming** | **Web Creation**

Certificate II in Information, Digital Media and Technology ICT20115

Certificate III in Information, Digital Media and Technology ICT30118

Diploma and University

ICT20115 Certificate II in Information, Digital Media and Technology

This qualification provides the foundation skills and knowledge to use information, digital media, and communications technology (IDMT) in any industry.

Taking a broad-base approach, this qualification allows individuals to gain the fundamental and foundational skills and knowledge required for entering the industry through an entry level position, or by proceeding to further studies in a more specialised IDMT field.

A great way to get started on an IDMT career path, this course, in addition to providing a broad base of skills and knowledge, also has a very modern and appealing composition, focusing on web technologies, social media and animation.

LEARNING AREAS

- Safe and sustainable practices
- Common software applications
- Digital and social media platforms and tools
- Website creation and content maintenance
- Producing digital images
- 2D animation
- Hardware and peripherals

JOB OPPORTUNITIES

- Website development
- ICT support services
- Animation
- Business administration
- Customer support
- Tech support

Generic Course Structure 2021

VCAA Structure 1

UNITS		TYPE	NOMINAL HOURS	WEEKS DELIVERY
ICTICT201	Use computer operating systems and hardware	Core	60	6
ICTICT211	Identify and use basic current industry specific technologies	Elective	40	4
ICTSAS203	Connect hardware peripherals	Elective	20	2
ICTICT203	Operate application software packages	Core	60	6
FSKWTG009	Write routine workplace texts	Import	15	1
ICTWEB201	Use social media tools for collaboration and engagement	Core	20	2
BSBSUS201	Participate in environmentally sustainable work practices	Core	20	2
BSBWHS201	Contribute to health and safety of others	Core	20	3
CUADIG201	Maintain interactive content	Elective	30	3
ICTSAS204	Record client support requirements	Elective	10	1
FSKLRG009	Use strategies to respond to routine workplace problems	Import	15	1
ICTICT202	Work and communicate effectively in an ICT environment	Core	40	4
FSKRDG010	Read and respond to routine workplace information	Import	15	1
ICTICT204	Operate digital media technology package	Core	40	4
		TOTAL	**405**	**40**

All units are shown in IVET's standard (suggested) sequence of delivery.

The weeks delivery per unit is based on a 40-week delivery period (avg 4 x 10-week terms).

COURSE DURATION	RECOMMENDED WEEKLY TIME COMMITMENT (Scheduled^)			
1 Year	**In-class**	8 hrs	**Homework**	2 hrs

Additional electives are available to substitute for a gaming, coding, web creation, or cyber security and support focused program.

^Scheduled hours means timetabled class time and time allotted for homework only. Further contributions to students' overall learning occur in a variety of ways - this will be documented in the course's Training & Assessment Strategy which will be provided to schools at the commencement of each school year.

Permissible Substitutes

The unit below is the remaining elective from within the qualification's packaging that is available for selection by schools.

This elective unit can only be substituted/swapped with other elective or imported units, but not added - i.e. the total number of units cannot be increased.

The core units (see reverse side) cannot be substituted and must be retained.

UNITS		TYPE	NOMINAL HOURS
CUASOU202	Perform basic sound editing	Elective	30

Further units may be available to import from other qualifications or training packages. In the event that your school has a specific need for a unit not listed above, please consult your Schools Relationship Officer.

Important – As the student resource is printed as a standardised course book, the unit-based resource for any substitute units will only be available in soft copy for the school/students to self-print.

ACTIVITY 1

Identify minimum / recommended system requirements

Each game/application has minimum and recommended system requirements – a list of hardware required to run the game at low settings (minimum) and higher settings (recommended) with better performance.

The system requirements will be different for each game. Listing the requirements will allow the lowest hardware required to be identified.

1. Use the internet to fill in the tables below on the next two pages, listing the minimum and recommended system requirements for each game.
2. Write NA for any components that are not listed in the system requirements.
3. Include the web addresses where the system requirements were found.

Windows 10 URL(s) _____

Component	Minimum	Recommended
Processor (CPU)		
Memory (RAM)		
Graphics (GPU)		
Storage		

DOTA 2 URL(s) _____

Component	Minimum	Recommended
OS		
Processor (CPU)		
Memory (RAM)		
Graphics (GPU)		
Storage		

CS:GO URL(s) _____

Component	Minimum	Recommended
OS		
Processor (CPU)		
Memory (RAM)		
Graphics (GPU)		

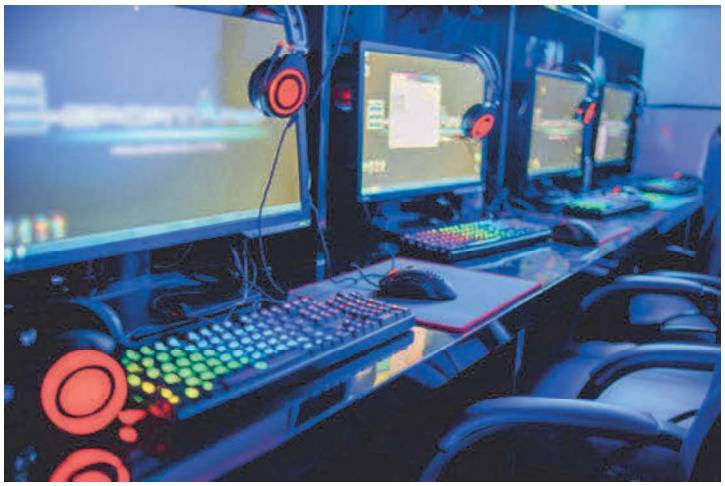
Sample Pages

From the student workbook.

- Supplied as hard-copy workbook
- Supplied as digital flip-book within the IVET Portal
- Contains interactive student activities
- Written by experts in the field

Case Study

INTERNET GAMING LOUNGE



You have been employed as the ICT manager of a new internet gaming lounge. Your task is to identify the **hardware components** and **operating system** that will be used for all computers in the lounge. The organisation has the following requirements: (continued on next page).

- 25 computers, with a maximum price of **$2000** each
- An operating system
- Installed games:
  - Counter-strike: Global Offensive (CS:GO)
  - DOTA 2
  - Fortnite
  - League of Legends (LOL)
  - Overwatch
  - Player-Unknown's Battlegrounds (PUBG)
- Installed software:
  - Steam
  - Blizzard App
  - Epic Launcher
  - Discord
  - Chrome
  - CCleaner
- Each game must run at a minimum of **60** frames per second
- » **High** detail settings (on a scale of Low, Medium, High, Very High, Ultra)

External hardware

- **Monitor** – size 24", resolution 1920x1080, refresh rate 144Hz.
- **Keyboard** – Mechanical, RGB, wired
- **Mouse** – at least 4 buttons, scroll wheel, wired
- **Headset**, with attached microphone, wired

ICT30118 Certificate III in Information, Digital Media and Technology

This certificate allows students to explore a variety of areas in IDMT. This program can be specialised or broad depending upon the needs of the students.

Upon completion of this carefully designed two-year course, students will satisfy the requirements to obtain a nationally recognised qualification; a full Certificate III in Information, Digital Media and Technology (ICT30118).

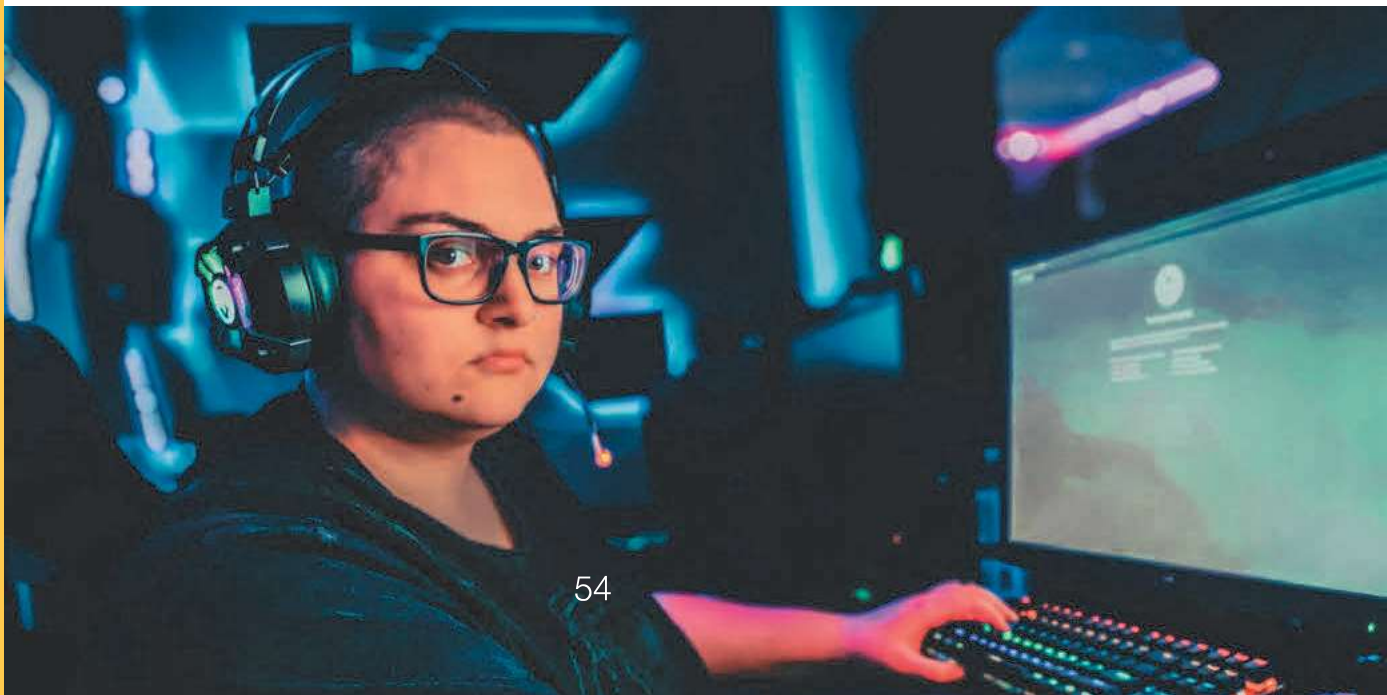
This course is designed to focus on support including cyber security or gaming, coding, and web creation.

LEARNING AREAS

- Producing digital images
- Social media
- Operating software packages
- Building websites
- The IT industry
- Environmental sustainability
- Providing IDMT assistance
- Equipment maintenance

JOB OPPORTUNITIES

- School technical support
- Technical support in an organisation
- Help desk assistant
- IDMT operations support
- IDMT user support
- PC support
- Customer support
- Cyber Security



Generic Course Structure 2021

UNITS		TYPE	NOMINAL HOURS	WEEKS DELIVERY
ICTICT203	Operate application software packages	Elective	60	8
BSBWHS304	Participate effectively in WHS communication and consultation processes	Core	30	4
ICTICT202	Work and communicate effectively in an ICT environment	Core	40	5
ICTSAS308	Run standard diagnostic tests	Core	40	5
ICTWEB303	Produce digital images for the web	Group D	30	4
ICTWEB201	Use social media tools for collaboration and engagement	Group D	20	4
ICTSAS303	Care for computer hardware #	Elective	20	3
ICTGAM301	Apply simple modelling techniques	Elective	50	7
		YEAR 1 TOTAL	**290**	**40**
ICTWEB302	Build simple websites using commercial programs	Group D	40	5
BSBEBU401	Review and maintain a website	Group D	50	7
ICTNWK304	Administer network peripherals #	Elective	20	3
BSBSUS401	Implement and monitor environmentally sustainable work practices	Core	40	5
ICTICT301	Create user documentation*	Core	20	3
ICTSAS307	Install, configure and secure a small office or home office network*	Elective	50	6
ICTICT302	Install and optimise operating system software*	Core	20	3
ICTSAS305	Provide ICT advice to clients*	Elective	40	5
ICTSAS306	Maintain equipment and software*	Elective	20	3
		YEAR 2 TOTAL	**300**	**40**

All units are shown in IVET's standard (suggested) sequence of delivery.
The weeks delivery per unit is based on an 80-week delivery period (avg 8 x 10-week terms).
*Indicates scored assessment availability.

COURSE DURATION	RECOMMENDED WEEKLY TIME COMMITMENT (Scheduled^)			
2 Years	**In-class**	6 hrs	**Homework**	1.25 hrs

Additional electives are available to substitute for a gaming, coding, web creation, or cyber security and support focused program.

^Scheduled hours means timetabled class time and time allotted for homework only. Further contributions to students' overall learning occur in a variety of ways - this will be documented in the course's Training & Assessment Strategy which will be provided to schools at the commencement of each school year.

Permissible Substitutes

The units below are the remaining electives from within the qualification's packaging that are available for selection by schools.
These elective units can only be substituted/swapped with other elective units marked #, but not added - i.e. the total number of units cannot be increased.
The core units and other electives (see reverse side) cannot be substituted and must be retained.

UNITS		TYPE	NOMINAL HOURS
CUAANM301	Create 2D Digital Animation	Elective E	35
CUAANM302	Create 3D Digital Animation	Elective E	75

Further units may be available to import from other qualifications or training packages. In the event that your school has a specific need for a unit not listed above, please consult your Schools Relationship Officer.
Important – As the student resource is printed as a standardised course book, the unit-based resource for any substitute units will only be available in soft copy for the school/students to self-print.

Identify common preventative maintenance techniques to support maintenance strategies

Preventative maintenance techniques are strategies that stop issues from occurring. Solving faults after they occur is very time-consuming; it is much more efficient to prevent them in the first place. This section will go through various techniques that will support the other maintenance strategies outlined earlier in this unit.

System failure and backup procedures

A system may fail for a wide variety of reasons, including software faults, viruses and malware, physical hardware damage and natural disasters. Each of these causes varies in their magnitude of system failure, ranging from one workstation that affects a single user, all the way to the destruction of a company's IT infrastructure affecting the entire organisation.

Some Possible Causes of System Failure	
Software Faults	**Malware**
• Incompatible application • Incorrect application settings • Incompatible application update • Incompatible operating system update	• Viruses/Worms • Key loggers • Spyware • Browser hijack
Physical Hardware Damage	**Natural Disasters**
• Worn-out hardware • Faulty internal components • Physical damage to external components • Electrical surge damage	• Fires • Floods • Earthquakes • Storms

Sample Pages

From the student workbook.

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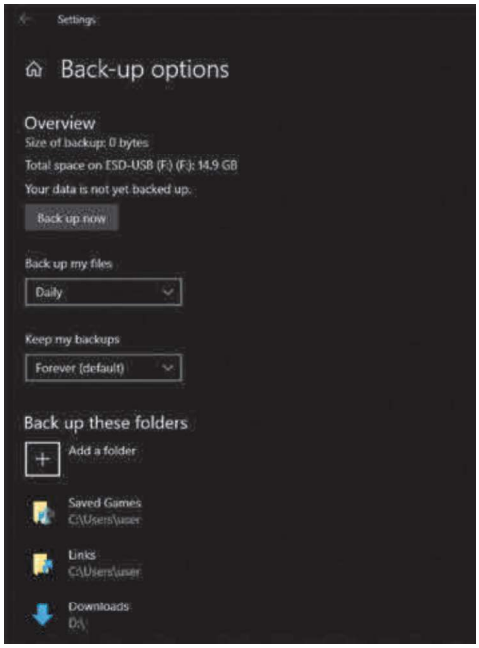
Backup file history

This application allows files to be copied to an external drive, so they can be restored if the originals are lost. To setup File history:

1. Connect an external HDD or USB flash drive to a USB port (preferably USB 3.0 or greater).
2. Select Start > Settings > Update and Security > Backup.
3. Select Add a drive. File history will search for the external HDD. Select the external HDD once found.
4. The Automatically back up files option should appear and be set to On.
5. Click More options.
6. Back up my files, select how regularly the backup should run – Daily should be enough for most users.
7. Under Keep my backups, select how long backups should be stored for – Forever is the default.
8. Back up these folders, check that all the folders to be backed-up are shown. If not, click Add a folder and select the folder to backup.
9. Click the Back up now button to start the first backup. This may take some time depending on the size of the files and folders being backed up.



To stop using the drive for backup purposes, click the stop using drive button in the back-up options.