Specification of Generic (Foundation) Competencies

Information Technology

**Summary Table of Units of Competency
and
Description of each Unit of Competency**

Summary Table of Units of Competency (IT)

Skills / Descriptors	Level 1	Level 2	Level 3	Level 4
Descriptors	Individuals are able to handle general computer operations such as using computer files and storage media, web surfing through the Internet, and simple office automation software.	Individuals are able to use IT tools effectively, make use of common application software packages to improve productivity in general working environment, make use of resources available on the Internet to share information with others.	Individuals are able to handle computer networking, resolve simple hardware and software problems, make use of computer applications and graphics applications, understand the characteristics and the use of different IT tools and resources, and select and integrate various IT tools in daily life.	Individuals are able to understand the functions of IT and its various computer applications and systems, evaluate the effectiveness of IT systems and applications, optimize productivity with the use of IT, and choose appropriate IT equipment to meet the needs of an organization.
Social Implications	• Demonstrate an understanding of legal issues, health and safety when using IT equipment *(GCIT101A)*	• Manage and protect data in a personal computer by following instructions *(GCIT201A)*	• Demonstrate knowledge and skills of maintaining information security when using the Internet *(GCIT301A)* • Demonstrate an understanding of social implications and contemporary issues of IT *(GCIT302A)*	• Demonstrate an understanding of professional conducts when using IT to support organizational functions *(GCIT401A)*
Computer System and Operations	• Demonstrate knowledge and skill of handling computer files and storage media *(GCIT102A)* • Enter Chinese characters using digitizing tablet *(GCIT103A)*	• Demonstrate knowledge and skill to operate a personal computer system *(GCIT202A)* • Install and handle computer accessories *(GCIT203A)* • Enter Chinese characters using keyboard *(GCIT204A)* • Maintain and share information using handheld devices *(GCIT205A)*	• Demonstrate knowledge and skills of using networked operating environment *(GCIT303A)* • Build a Small-Office Home-Office (SOHO) using network components *(GCIT304A)* • Use handheld devices to improve productivity *(GCIT305A)*	• Select and administrate computer systems and networks to support organizational functions *(GCIT402A)*
Graphics and Multimedia	• Use basic functions of an image document viewer *(GCIT104A)*	• Produce multimedia elements using computer devices by following instructions *(GCIT206A)* • Produce computer graphics by following instructions *(GCIT207A)*	• Produce a design illustration using computer applications *(GCIT306A)* • Produce computer graphics using editing applications *(GCIT307A)* • Produce a multimedia application using computer devices and applications *(GCIT308A)* • Produce animation using computer applications *(GCIT309A)*	NIL

	Level 1	Level 2	Level 3	Level 4
Descriptors / **Skills**	Individuals are able to handle general computer operations such as using computer files and storage media, web surfing through the Internet, and simple office automation software.	Individuals are able to use IT tools effectively, make use of common application software packages to improve productivity in general working environment, make use of resources available on the Internet to share information with others.	Individuals are able to handle computer networking, resolve simple hardware and software problems, make use of computer applications and graphics applications, understand the characteristics and the use of different IT tools and resources, and select and integrate various IT tools in daily life.	Individuals are able to understand the functions of IT and its various computer applications and systems, evaluate the effectiveness of IT systems and applications, optimize productivity with the use of IT, and choose appropriate IT equipment to meet the needs of an organization.
Information Processing	• Use basic functions of a word processor *(GCIT105A)* • Use basic functions of a spreadsheet program *(GCIT106A)* • Use basic functions of a presentation program *(GCIT107A)*	• Produce word processing documents by following instructions *(GCIT208A)* • Produce spreadsheets by following instructions *(GCIT209A)* • Produce presentations by following instructions *(GCIT210A)* • Produce a database by following instructions *(GCIT211A)*	• Produce word processing documents to meet user requirements *(GCIT310A)* • Produce spreadsheets to meet user requirements *(GCIT311A)* • Produce presentations to meet user requirements *(GCIT312A)* • Create and maintain a database to meet user requirements *(GCIT313A)* • Demonstrate integrated use of common office automation application software *(GCIT314A)*	• Operate and maintain a database to support organizational functions *(GCIT403A)* • Solve statistical and quantitative problems using computer applications *(GCIT404A)* • Produce spreadsheets to support organizational functions *(GCIT405A)* • Produce desktop published documents to support organizational functions *(GCIT406A)* • Plan and manage project using computer applications *(GCIT407A)*
Internet and its applications	• Navigate and acquire information within the World Wide Web using a browser *(GCIT108A)* • Use basic functions of an email software *(GCIT109A)*	• Modify and produce a web page with tools by following instructions *(GCIT212A)* • Exchange information using emails *(GCIT213A)* • Exchange information using instant messaging services *(GCIT214A)* • Exchange information using online forums and newsgroups *(GCIT215A)*	• Produce an interactive website to meet user requirements *(GCIT315A)* • Operate Internet services with computer applications *(GCIT316A)*	• Use web technology to support organizational functions *(GCIT408A)* • Use e-commerce applications to support organizational functions *(GCIT409A)* • Use Information and Communications Technology (ICT) to support organizational functions *(GCIT410A)*

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Demonstrate an understanding of legal issues, health and safety when using IT equipment
Unit Code	GCIT101A
Level	1
Credit	2

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of legal issues associated with using IT	1.1 Aware of the legal responsibility in using IT **Range** Topics may include but are not limited to copyright, piracy and intellectual property
2 Demonstrate an understanding of personal safety related to using IT equipment	2.1 Recognize safety steps and apply precautions in using IT equipment with power supply **Range** Topics may include but are not limited to avoiding electric shock, handling power supply and connections with care 2.2 Recognize safety steps and apply precautions in handling computer peripherals and components **Range** Topics may include but are not limited to the protection from chemical solvents and irritants, the eye care for using scanners and laser sources of CD/DVD, burning protection when handling laser printer's toner, the use of appropriate tools or steps for personal protection from injuries
3 Demonstrate an understanding of ergonomic principles in using IT equipment	3.1 Apply occupational health and safety precautions associated with using IT equipment in working environment **Range** Topics may include but are not limited to health problems for prolonged computer users such as eye protection, viewing angle and distance, proper posture when using a computer; keyboard height and repetitive stress injuries (RSI)

Unit Range
This unit covers the knowledge and skills of maintaining legal responsibility, health and safety when using IT equipment. Most industries may find this unit useful.

Assessment Guidelines

1 The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2 Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3 All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
Practical application in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Demonstrate knowledge and skill of handling computer files and storage media
Unit Code	GCIT102A
Unit Level	1
Unit Credit	2

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of computer data storage	1.1 Recognize the purposes of different types of memory and disk storage media **Range** Media may include but are not limited to RAM, ROM, Flash, hard-disk, CD/DVD, digital linear tape 1.2 Select appropriate storage media to match the nature of the information **Range** Topics may include but are not limited to capacity, physical size, reliability and cost; the use of primary and secondary storage
2 Demonstrate an understanding of IT equipment and storage media protection	2.1 Protect computer storage media from being damaged during day-to-day operation **Range** Topics may include but are not limited to the avoidance of liquid spillage and handling of storage media (eg floppy disk, CD, DVD) 2.2 Protect IT equipment from being damaged in daily uses **Range** Topics may include but are not limited to maintaining ventilation to prevent over-heat, the avoidance of equipment working in high temperature, and avoidance of power failure damage
3 Handle different computer storage media	3.1 Operate different types of storage media with appropriate devices **Range** Media may include but are not limited to CD,

			DVD, floppy disks, flash memory and thumb drives
		3.2	Copy data from media or/and save to media according to features of media **Range** Features may include but are not limited to the size of files, capacity, speed and reliability of storage media
4	Handle computer files in an operating environment	4.1	Create folders (directories) and sub-folders with meaningful names
		4.2	Select folders (directories) and display their properties **Range** Operations may include but are not limited to handling of sorted listing by showing short-form or details of the files; expanding and collapsing the details of folders
		4.3	Copy, rename, move, delete, and undelete computer files/folders **Range** Operations may include but are not limited to the use of functions and tools to select, cut, cut and paste, copy and paste, move and delete files/folders
		4.4	Open, display and execute (if applicable) computer files
		4.5	Operate compressed files in folders (directories) **Range** Topics may include but are not limited to opening, decompressing files, decompressing files into a folder, and compressing selected files into a file

Unit Range

This unit covers the knowledge and skills of handing computer files and storage media. Most industries may find this unit useful.

Assessment Guidelines

1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1   Learners should have access to a personal computer and appropriate storage media.

2   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title   Enter Chinese characters using digitising tablet

Unit Code   GCIT103A

Unit Level   1

Unit Credit   2

Elements of Competency	Performance Criteria
1 Use digitising tablet for entering Chinese characters	1.1 Start the digitising tablet program 1.2 Detect the status of the digitising tablet 1.3 Select an appropriate hand writing recognition mode for entering Chinese characters **Range**: Topics may include but are not limited to single character mode and whole screen editing mode 1.4 Use the tablet and stylus to enter Chinese characters 1.5 Effective use of Chinese punctuation characters when entering Chinese text in a document 1.6 End the digitising tablet program
2 Enter Chinese characters in the appropriate context	2.1 Use the digitising tablet to enter Chinese characters in a required context **Range** Contexts may include but are not limited to word processors, search engines query boxes, URL of the browser and emails

Unit Range

This unit covers the skills of using digitising tablet to enter Chinese characters. Most industries may find this unit useful.

Assessment Guidelines

1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2 Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3 All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4 Learners may be required to achieve a stated accuracy and speed for a given passage within a given period of time.

Special Notes
1 Learners should have access to a personal computer with a digitizing tablet.

2 Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3 Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title   Use basic functions of an image document viewer

Unit Code   GCIT104A

Level   1

Credit   2

Elements of Competency	Performance Criteria
1 Start an image document viewer	1.1 Start and end an image document viewer program 1.2 Recognize and locate an image document file 1.3 Open image documents for viewing 1.4 Save and close documents in appropriate storage media
2 Handle text within an image document	2.1 Navigate information in an image document **Range** Topics may include but are not limited to viewing, zooming in/out, rotate and pages navigation 2.2 Use tools to select a section of text **Range** Topics may include but are not limited to searching and copying to clipboard
3 Print a document	3.1 Preview a document 3.2 Print the selected section or whole image document

Unit Range
This unit covers the basic skills of using image document viewer. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   Learners are required to open file, select, copy, search text, and print an image document from given instructions.

Special Notes
1   Learners should have access to a personal computer with appropriate image document viewer software, and printer.

2   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title   Use basic functions of a word processor

Unit Code   GCIT105A

Level   1

Credit   2

Elements of Competency	Performance Criteria
1 Start a word processing program	1.1 Start and end a word processing program 1.2 Recognize and locate a word processing file 1.3 Open documents for viewing 1.4 Save and close documents in appropriate storage media
2 Handle text in a document	2.1 Select text in a document **Range** Selections may include but are not limited to a word, sentence, paragraph, block of text and the whole document 2.2 Insert, delete, and overwrite text in a document 2.3 Copy and move text in a document **Range** Topics may include but are not limited to moving of text within document or between documents and the use of clipboard facility to copy 2.4 Find and replace text in a document 2.5 Use spell and grammar checking functions to proof-read a document
3 Print a document	3.1 Preview a document 3.2 Print a document according to layout requirements

Unit Range
This unit covers the basic skills of using a word processor. Most industries may find this unit useful.

Assessment Guidelines

1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   Learners are required to open, close, operate, and print a word processing document from given instructions.

Special Notes

1   Learners should have access to a personal computer with appropriate word processing software, and printer.

2   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment*   is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title Use basic functions of a spreadsheet program

Unit Code GCIT106A

Level 1

Credit 2

Elements of Competency	Performance Criteria
1 Start a spreadsheet program	1.1 Start and end a spreadsheet program 1.2 Recognize and locate a spreadsheet file 1.3 Open a spreadsheet file for viewing 1.4 Save and close a spreadsheet onto appropriate storage media
2 Handle data in a spreadsheet	2.1 Navigate among the cells 2.2 Modify and enter data in cells **Range** Data entries may include basic text, numeric data, date and time
3 Print a spreadsheet	3.1 Preview a spreadsheet 3.2 Print a spreadsheet according to layout requirements **Range** Operations may include but are not limited to printing a spreadsheet to fit in a page

Unit Range
This unit covers the basic skills of using spreadsheet program. Most industries may find this unit useful.

Assessment Guidelines
1 The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2　Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3　All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4　Learners are required to open, save, handle data and print a spreadsheet document from given instructions.

Special Notes
1　Learners should have access to a personal computer with spreadsheet application software, and printer.

2　Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3　Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Use basic functions of a presentation program
Unit Code	GCIT107A
Level	1
Credit	2

Elements of Competency	Performance Criteria
1 Start a presentation program	1.1 Start and end a presentation program 1.2 Recognize and locate a presentation document 1.3 Open an existing presentation document for viewing 1.4 Save and close presentation documents in appropriate storage media
2 Handle slides and text in a presentation	2.1 Delete slides, insert new slides and choose an appropriate layout for individual slides **Range** Layouts may include but are not limited to title slide, bulleted lists and chart/image with text 2.2 Add/delete text and images into/from slides 2.3 Copy and paste text and images within a presentation document or between presentation documents 2.4 Find and replace text in a presentation document 2.5 Use spell checking function to proof-read document
3 Play and print a presentation	3.1 Use command(s) to run a slide show 3.2 Print a presentation document according to layout requirements

Unit Range
This unit covers the skills of using a presentation program. Most industries may find this unit useful.

Assessment Guidelines

1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   Learners are required to open, save, modify, play and print a presentation from given instructions.

Special Notes
1   Learners should have access to a personal computer with appropriate presentation software, and printer.

2   Learners should recognize with the legal responsibility in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title   Navigate and acquire information within the World Wide Web using a browser

Unit Code   GCIT108A

Level   1

Credit   2

Elements of Competency	Performance Criteria
1 Start and end a browser program	1.1 Start multiple instances of a browser program 1.2 Terminate all instances of a browser program
2 Use browser controls to navigate web pages	2.1 Switch to one instance of the browser program 2.2 Enter URL (Uniform Resource Locator) in the browser to open a web page 2.3 Use control buttons and functions to navigate web pages **Range** Topics may include but are not limited to hyperlink, forward and back, home, stop, search and reload buttons/functions 2.4 Right click the hyperlink to download files and save to appropriate storage media 2.5 Bookmark a web page to record the visited website 2.6 Organise the bookmarked websites 2.7 Display the history list of visited websites and select an appropriate website to navigate from the list 2.8 Set a web page as the home page 2.9 Preview and print contents of a web page 2.10 Save contents of a web page for off-line usages 2.11 Aware of the legal responsibility associated with the use of Internet activities
3 Use search engines to find	3.1 Enter the web address of a search engine portal

selected topics	in the browser
	3.2 Formulate and enter search query in appropriate query box
	Range Topics may include but are not limited to the use of key words or phrases for simple search queries, Boolean operators(eg AND, OR and NOT) for advanced search options
	3.3 Navigate to the appropriate web pages by clicking from the list

Unit Range
This unit covers the knowledge and skills of using a browser to navigate and acquire information on Internet. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1   Learners should have access to a personal computer with a web browser and Internet connection.

2   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed as co-requisite.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Use basic functions of an email software
Unit Code	GCIT109A
Level	1
Credit	2

Elements of Competency	Performance Criteria
1　Start an email program	1.1　Start and end an email program
2　Create and send an email	2.1　Create a new email
	2.2　Enter the email address(es) of the recipient(s)
	Range Topics may include but are not limited to addressing a message to a single or multiple recipients, together with carbon copy (CC) function
	2.3　Enter a subject title that is appropriate to the message content
	2.4　Attached files to the email
	2.5　Send the email
	2.6　Aware of the legal responsibility associated with the use of emails
3　Read and reply an email message	3.1　Open a received email
	3.2　Open, view and/or save attached files
	3.3　Use appropriate buttons and functions to reply the message
	Range Buttons and functions may include but are not limited to reply to sender, reply all, reply with original message, reply without original message and forward a message
	3.4　Aware of the legal responsibility associated with the use of emails

Unit Range

This unit covers the basic skills of using email to exchange information on Internet. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1   Learners should have access to a personal computer with an email software and Internet connection.

2   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Manage and protect data in a personal computer by following instructions
Unit Code	GCIT201A
Level	2
Credit	3

Elements of Competency	Performance Criteria
1 Manage files on a PC system	1.1 Search and locate files in a PC system 1.2 Identify the logical structure of files and folders, use descriptive file names; and show how to store files in a folder 1.3 Manage files and folders in a computer system **Range** Topics may include but are not limited to opening, executing (if applicable), copying, renaming, moving, deleting, undeleting and creating shortcuts
2 Apply appropriate measures against common threats to protect data stored on a PC system	2.1 Recognize common threats to data stored in a PC system **Range** Threats may include but are not limited to unauthorised access, Internet and email risks, virus/Trojan attack, spyware, power failure, equipment failure and data corruption 2.2 Apply measures to ensure the availability of data held in a PC system **Range** Security practices and measures may include but are not limited to backup techniques, restoring backup copies to/from secondary media, frequency of saving, virus protection, the use of uninterruptible power supply (UPS) units or surge protectors 2.3 Apply measures to secure a PC system from unauthorised access **Range** Security practices and measures may include

	but are not limited to passwords authentication, logoff, shutdown, physical security enhancements, firewall installations, the use of anti-virus software, anti-spyware and system patches and updates
3 Manage information with consideration of ethics and information security	3.1 Apply measures to manage information in a PC system by following instructions **Range** Practices and measures may include but are not limited to copyright, piracy, personal data privacy and organisational confidentiality 3.2 Apply measures to protecting organizations and/or individuals from various threats by following instructions **Range** Practices and measures may include but are not limited to the use of filtering software, anti-spam and parental guidance

Unit Range
This unit covers the knowledge and skills of managing and protecting data in a PC. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1   Learners should have access to a personal computer.

2   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Demonstrate knowledge and skill to operate a personal computer system
Unit Code	GCIT202A
Unit Level	2
Unit Credit	3

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of the hardware components of a personal computer	1.1 Identify the features and functions of the hardware components of a personal computer **Range** Components may include but are not limited to control units, motherboards, Random Access Memory (RAM), Read Only Memory (ROM), keyboards, pointing devices, display monitors, disk drives (eg hard disks, CD, DVD), printers, digital cameras, web-cams, scanners and modems 1.2 Identify the functional diagram of a personal computer **Range** Topics may include but are not limited to input, process and output
2 Demonstrate an understanding of the functions and purposes of personal computer software	2.1 Identify the purposes of system software and functions of application software 2.2 Identify and select appropriate application software/packages to accomplish common tasks **Range** Topics may include but are not limited to office automation tasks and communication tasks using the Internet
3 Manage a personal computer in an operating environment	3.1 Use basic commands of the operating environment to handle simple tasks **Range** Topics may include but are not limited to customization and familiarisation with the GUI environment such as icons, task bar and desktop

	3.2	Launch programs with different methods
		Range Topics may include but are not limited to the use of shortcuts and function keys
	3.3	Search and locate files/folders within the PC system
		Range Topics may include but are not limited to the use of recycle bin and file management tools for files and folders
	3.4	Use the help function to search for useful hints and get explanations

Unit Range
This unit covers the knowledge and skills of operating a PC. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1   Students should have access to a personal computer with appropriate operating environment.

2   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Install and handle computer accessories
Unit Code	GCIT203A
Unit Level	2
Unit Credit	4

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of PC protection during installation and daily operations	1.1 Protect electronic components from being damaged during the installation of peripherals and PC system upgrade **Range** Topics may include but are not limited to the use of a wrist strap and mat with a grounding cable to prevent electrostatic discharge (ESD) damage 1.2 Protect computer systems and peripherals from being damaged in daily operations **Range** Topics may include but are not limited to maintaining ventilation to prevent over-heat, the avoidance of running equipment in high temperature and avoidance of power failure damage
2 Install and setup a local printer	2.1 Identify various printer ports and connection cables **Range** Basic ports and connections may include but are not limited to the parallel printer port and Universal Serial Bus (USB) port, and their related cables 2.2 Select and install the printer driver by following the media/manufacturers' instructions 2.3 Select an appropriate printer as the default printer 2.4 Command the printer to print the test page **Range** Basic tests may include but are not limited to printing with various printing features, colour

			and graphics
3	Install and setup a scanner	3.1	Identify various ports and connection cables **Range** Basic ports and connections may include but are not limited to the parallel printer port and Universal Serial Bus (USB) port, and their related cables
		3.2	Select and install the scanner driver by following the media/manufacturer's instructions
		3.3	Select an appropriate resolution and format according to the features of the documents/objects
		3.4	Activate the scanner and scan documents/objects **Range** Basic scanning may include but is not limited to black and white text, colour photographs, negative films and slides
		3.5	Save/convert the scanned files to appropriate file formats **Range** Basic file formats may include but are not limited to JPEG, PDF, BMP, GIF and TIFF
4	Install network cable and setup a network connection	4.1	Detect the status of the LAN connection
		4.2	Use tools (eg GUI) to configure network parameters **Range** Topics may include but are not limited to network address and hostname or name of workgroup
		4.3	Activate/reactivate the network services
5	Install and setup a wireless connection	5.1	Detect the status of the wireless LAN connection **Range** Basic wireless connections may include but are not limited to those using an Wi-Fi or Bluetooth
		5.2	Use tools (eg GUI) to configure network parameters

	Range
	Topics may include but are not limited to network address and hostname or name of workgroup
	5.3 Activate/reactivate the network services
6 Install and setup a web-cam	6.1 Connect the web-cam to a PC system
	Range Connections may include but are not limited to the Universal Serial Bus (USB) or Firewire
	6.2 Configure and setup the web-cam by adjusting its resolution, focus, viewing angle and lighting level

Unit Range

This unit covers the skills of installing and handling computer accessories and peripherals. Most industries may find this unit useful.

Assessment Guidelines

1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes

1   Learners should have access to a personal computer with appropriate peripherals.

2   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Enter Chinese characters using keyboard
Unit Code	GCIT204A
Unit Level	2
Unit Credit	3

Elements of Competency	Performance Criteria
1 Identify and recognize layout of a computer keyboard	1.1 Switch between Chinese and English input mode 1.2 Effective use of keyboard for text input with proper methods of typing
2 Use proper method of typing Chinese characters with a computer keyboard	2.1 Effective use of Chinese input methods to enter Chinese text in a document **Range** Topics may include but are not limited to the use of common formatting of Chinese characters 2.2 Effective use of word-wrap feature to enter Chinese text in a document 2.3 Effective use of Chinese punctuation characters when entering Chinese text in a document

Unit Range
This unit covers the skills of using keyboard to enter Chinese characters. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work

situations as possible and the performance criteria should be open to those concerned.

4   Learners may be required to achieve a stated accuracy and speed for a given passage within a given period of time.

Special Notes

1   Learners should have access to a personal computer with the required Chinese input software.

2   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3   Competence in GCIT105A, *Use basic functions of a word processor* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Maintain and share information using handheld devices
Unit Code	GCIT205A
Unit Level	2
Unit Credit	2

Elements of Competency	Performance Criteria
1 Use and operate a handheld device	1.1 Setup and configure the handheld device where appropriate **Range** Topics may include but are not limited to the calibration of the touch screen, setting of basic user configurations such as setting password, time-zone, backlighting and sound level 1.2 Operate the handheld device by following the manufacturer's guidelines **Range** Topics may include but are not limited to the use of an appropriate stylus for the touch screen and steps for switching on/off the handheld device
2 Exchange information between a handheld device and a desktop machine	2.1 Connect the handheld device to a desktop machine to download/upload information **Range** Topics may include but are not limited to synchronizing organizational data and Personal Information Management (PIM) such as the calendar, contact list, note, tasks and inbox mails 2.2 Backup data/files from the handheld device on a desktop machine 2.3 Restore and load data/files from a desktop machine on the handheld device
3 Maintain a handheld device to operate effectively	3.1 Maintain the battery level of the handheld device to meet the user requirements 3.2 Protect the handheld device from physical damage in daily operations

	Range Topics may include but are not limited to the avoidance of dropping, screen scratching and, the use screen and body protector

Unit Range
This unit covers the skills of using handheld devices to maintain and share information. Industries in logistics and companies with mobile workforce may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1   Learners should have access to a personal computer with appropriate peripherals and a handheld device.

2   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Produce multimedia elements using computer devices by following instructions
Unit Code	GCIT206A
Unit Level	2
Unit Credit	4

Elements of Competency	Performance Criteria
1 Administrate a printer	1.1 Check the status of the printer **Range** Basic observations may include but are not limited to checking the printer LED/LCD status and the printer default settings 1.2 Modify and select the default printer settings to meet the user requirements **Range** Basic settings may include but are not limited to resolution, economy printing, multiple pages, double sided printing, watermark, reduced size printing and print-to-file
2 Use computer applications to create hard copies	2.1 Modify the paper selection settings to meet the user requirements **Range** Basic settings may include but are not limited to size selection and quality of paper 2.2 Use preview function to check and adjust printing layout and close preview **Range** Topics may include but are not limited to adjusting preview size and accepting settings

3	Handle audio peripherals for producing and playing audio files	3.1	Check the status of the microphone
			Range Topics may include but are not limited to connecting of the microphone and adjusting microphone volume
		3.2	Use a microphone to record sound at an appropriate level
		3.3	Save the recorded sound in an appropriate format
		3.4	Playback the recorded sound at an appropriate level
4	Handle and operate a scanner to produce images	4.1	Check the status of the scanner
		4.2	Select and modify the scanner settings to meet requirements
			Range Basic settings may include but are not limited to size selection, black and white/ colour selection, resolution and quality enhancement
		4.3	Identify and select appropriate file formats according to the nature of documents
			Range Selection of file formats should be based on the quality and size of images/contents
		4.4	Save and convert scanned files in appropriate file formats
			Range Basic file formats may include but are not limited to JPEG, PDF, BMP, GIF and TIFF
5	Handle a digital camera and video camera to produce image/video files	5.1	Identify commonalities and differences between the digital camera (DC) and digital video camera (DV)
			Range Topics may include but are not limited to similarities between the DC and DV
		5.2	Identify and select an appropriate quality and resolution of the digital media to meet user requirements
			Range Topics may include but are not limited to the choices of the image or video, quality and resolution of the image/video, ease of editing

		and storage of the media
		5.3 Connect the DC or DV equipment to a computer and upload files **Range** Topics may include but are not limited to the use of the Universal Serial Bus (USB) or Firewire 5.4 Store and transfer the digital images and video clips in appropriate storage media **Range** Formats of storage media may include but are not limited to hard disk, Smart Media, SD, Memory Stick and CF
6	Handle and operate a web-cam to produce video files	6.1 Identify strengths and weaknesses of the web-cam when compare with the DC/DV equipment 6.2 Mount the web-cam to an appropriate position and connect to computers **Range** Physical positioning may include but is not limited to the face-to-face video conference and video surveillance 6.3 Identify and select an appropriate operation mode for the web-cam **Range** Topics may include but are not limited to selecting resolution, lighting condition and night-vision mode
7	Produce multimedia elements by following instructions	7.1 Use appropriate tools to produce suitable multimedia elements to meet user requirements **Range** Topics may include but are not limited to selecting and integrating various entities into suitable elements for other computer and web applications

Unit Range
This unit covers the skills of using computer accessories and peripherals to produce multimedia elements. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral

presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   Learners are required to operate and use peripherals to meet daily use in a typical working environment.

Special Notes
1   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

2   Learners should recognize with the ethics and legal responsibility in using information.

3   Learners should have access to a personal computer with appropriate peripherals.

4   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Produce computer graphics by following instructions
Unit Code	GCIT207A
Level	2
Credit	2

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of the uses of a computer graphics application	1.1 Recognize features and classifications of a computer graphics application 1.2 Identify and select an appropriate computer graphics application for the task
2 Draw/paint computer graphics from instructions	2.1 Open a new file or an existing graphics file for editing 2.2 Draw/paint and edit computer graphics to meet specific requirements 2.3 Transform drawn/paint images using editing tools/functions **Range** Actions may include but are not limited to moving, resizing, flipping, rotating, filling, modifying line weight, reshaping and deleting
3 Save and print computer graphics	3.1 Save graphics files in appropriate formats **Range** File formats may include but are not limited to BMP, GIF and JPEG 3.2 Use preview function to check, adjust and print computer graphics

Unit Range
This unit covers the skills of using a computer to produce graphics. People working in sales and marketing, education, advertising, the leisure industry, printing and publishing may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate

forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   Assessment of this unit should focus on the ability to use the specified drawing and painting tools, rather than the artistry of the graphics produced.

Special Notes
1   Learners should have access to a personal computer, printer and a graphics software application package with the specified drawing and painting tools.

2   Learners should recognize with the ethics and legal responsibility in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Produce word processing documents by following instructions
Unit Code	GCIT208A
Level	2
Credit	3

Elements of Competency	Performance Criteria
1 Create and edit a document	1.1 Create a new document in order to enter text 1.2 Open an existing document for editing
2 Manipulate text and objects in a document from instructions	2.1 Find and replace text in a document 2.2 Use spell and grammar checking functions to proof-read a document **Range** Topics may include but are not limited to the auto correction and auto text functions 2.3 Insert symbols, shapes, graphical text or pictures from appropriate libraries 2.4 Use the help function to search for useful hints and get explanations
3 Format selected text in a document from instructions	3.1 Format selected text in terms of font type, font size, font style (bold, italics, underlined), colour, alignment (left, right, centre, justified), indentation, bullets and numbering, and line spacing 3.2 Copy text format from the selected text **Range** Topics may include but are not limited to the use of the format copying tools or clip boxes 3.3 Set tabs (left, right, centered, decimal, leader) to format text 3.4 Change page display modes (normal, page layout, web, outline) to facilitate viewing 3.5 Use multi-columns to format text

		3.6	Use page breaks and section breaks to format text
		3.7	Insert comments, footnotes, endnotes, headers and footers to enhance a document
			Range Topics may include but are not limited to inserting page numbers, total number of pages, and setting page numbers for different sections
4	Create tables in a document	4.1	Create a new table by insertion or drawing
		4.2	Insert, delete, and copy rows or columns to enhance a table
		4.3	Format a table as instructed
			Range Topics may include but are not limited to resizing, line style, merging cells; splitting cells, border and shading
5	Print a document	5.1	Set basic print options as instructed
			Range Topics may include but are not limited to selecting printer, page orientation, page size, page margin, page range, and number of copies
		5.2	Use preview to check and adjust the setting of the document
		5.3	Print a document in accordance with the layout requirements

Unit Range
This unit covers the skills of using a word processing application in general office environment. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the

specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   Learners are required to create, modify, edit and print a word processing document from given instructions.

Special Notes

1   Learners should have access to a personal computer with appropriate word processing software, and printer.

2   Learners should recognize with the ethics and legal responsibility in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Produce spreadsheets by following instructions
Unit Code	GCIT209A
Level	2
Credit	3

Elements of Competency	Performance Criteria
1 Create and edit a spreadsheet	1.1 Create a new spreadsheet to enter data 1.2 Open a spreadsheet file for editing data, formulas, functions and formats
2 Manipulate data in a spreadsheet from instructions	2.1 Enter data into the spreadsheet using labels or values 2.2 Copy and paste data within and between worksheets **Range** Include the use of paste with special selection function 2.3 Apply the spreadsheet cell functions as instructed **Range** Functions may include but are not limited to summation, count, maximum and minimum 2.4 Format cells in terms of cell width, row height, alignment, text and number **Range** • Cell alignments: may include but are not limited to left, right, center alignment, text wrap and center across columns • Text formats: may include but are not limited to font style, font size, font colour, bold, italic and underline • Number formats: may include but are not limited to currency, percentage • Date and time formats: may include but are not limited to style, abbreviate, Chinese and English characters display • Use auto format function to format text 2.5 Insert comments, headers and footers to a

		worksheet
		2.6 Use the help function to search for useful hints and get explanations
3 Create charts/graphs in a spreadsheet from instructions	3.1 Create charts/graphs from spreadsheet cell ranges	
		Range Include different types of chart/graphs
	3.2 Insert pictures into a spreadsheet	
4 Print a spreadsheet	4.1 Set basic print options as instructed	
		Range Settings may include but are not limited to printer selection, page orientation, page size, page margin, page range, and number of copies
	4.2 Preview and adjust the format and printing layout of a spreadsheet	
	4.3 Print a spreadsheet in accordance with the layout requirements	

Unit Range
This unit covers the skills of using spreadsheets in general office environment. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   Learners are required to create, modify, run and print a spreadsheet document from given instructions.

Special Notes
1   Learners should have access to a personal computer with appropriate spreadsheet software, and printer.

2   Learners should recognize with the ethics and legal responsibility in using information.

3　Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4　Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Produce presentations by following instructions
Unit Code	GCIT210A
Level	2
Credit	3

Elements of Competency	Performance Criteria
1 Create and edit a presentation	1.1 Create a new presentation 1.2 Open presentation documents for editing **Range** Operations may include more than one presentation documents
2 Manipulate slides, text and objects in a presentation from instructions	2.1 Modify a slide layout as instructed **Range** Topics may include but are not limited to adding images, sound, single-level and multi-level bullets or numbers, using outline pane to add text, deleting selected text and images 2.2 Select and apply a design template 2.3 Use the help function to search for useful hints and get explanations
3 Format text in a slide from instructions	3.1 Format a selected text as instructed **Range** Topics may include but are not limited to font type, font size, font style (bold, italics, underlined), colour, alignment (left, right, centre, justified), indentation, bullets and numbering, and line spacing 3.2 Copy text format from selected text 3.3 Change presentation views (normal view, slide sorter view, and slide show view) 3.4 Add notes to slides 3.5 Insert slide numbers and footers 3.6 Hide selected slides

4	Add graphics and apply animation to selected text and objects	4.1	Add the selected images from a file or clip art
		4.2	Add animation effects to the text or images
			Range Topics may include but are not limited to sound effects, words and text effects and ways of triggering motions
		4.3	Modify the slide transition style and time to meet the user requirements
			Range Topics may include but are not limited to fade-in and fade-out
5	Play and print presentation	5.1	Run a slide show according to the user requirements
			Range Topics may include but are not limited to the use of forward, backward, go to a specific slide and repeated auto run buttons/functions
		5.2	Set basic print options to meet the user requirements
			Range Settings may include but are not limited to printer selection, page orientation, page size, page margin, page range, number of copies, print slides, handouts, notes and sending to word processing document
		5.3	Print the document according to the layout requirements

Unit Range:
This unit covers the skills of using a presentation application in general office environment. Most industries may find this unit useful.

Assessment Guidelines
1 The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2 Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3 All assessment activities should be valid, reliable and practicable, with the focus on

outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   Learners are required to create, modify, run and print a presentation from given instructions.

Special Notes
1   Learners should have access to a personal computer with appropriate presentation software, and printer.

2   Learners should recognize with the ethics and legal responsibility in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title   Produce a database by following instructions

Unit Code   GCIT211A

Level   2

Credit   3

Elements of Competency	Performance Criteria
1 Demonstrate understanding of a database system	1.1 Recognize the purpose of a database management system 1.2 Recognize the functions of tables, records, and fields and their relationships 1.3 Recognize the functions of the primary key and foreign key in a table
2 Create and open a database	2.1 Start and end a database program 2.2 Create a new database 2.3 Locate and open an existing database 2.4 Save and close a database 2.5 Use the help function to search for useful hints and get explanations
3 Manipulate data in a database from instructions	3.1 Add records to an existing database by using functions 3.2 Amend and delete records by using functions 3.3 Use preview function to check, adjust and print the contents of a database
4 Use a form to view records	4.1 Create a data entry form for record viewing 4.2 Use a form to navigate records 4.3 Use a form to add, delete and modify records 4.4 Save and close a form
5 Create a simple customized report	5.1 Select the required fields to generate a report 5.2 Use preview function to check, adjust and print the report

Unit Range
This unit covers the skills of using database in general office environment. Most industries may find this unit useful.

Assessment Guidelines
1 The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2 Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3 All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4 Learners are required to open a simple database with at least 2 tables, create data entry forms and simple custom report from given instructions.

Special Notes
1 Learners should have access to a personal computer with a database program and printer.

2 Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3 Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Modify and produce a web page with tools by following instructions
Unit Code	GCIT212A
Level	2
Credit	4

Elements of Competency	Performance Criteria
1 Identify and select tools to modify a web page	1.1 Recognize different methods of modifying a web page 1.2 Select a tool to edit a web page
2 Demonstrate knowledge and skills to produce a simple web page	2.1 Identify the purpose of a web page and its intended audience 2.2 Identify and select an appropriate method and tool to construct a web page **Range** Topics may include but are not limited to using HTML or web-page authoring tools 2.3 Identify text, headings, and graphics of the web page
3 Enter text and produce a web page from instructions	3.1 Use a template to enter text and headings 3.2 Enter text and headings to produce a web page **Range** Modify a web page by editing the HTML source code, or using a selected web-page authoring tools
4 Select and place appropriate graphics from instructions	4.1 Select and insert graphics to enhance the web page **Range** Topics may include but are not limited to functions to copy and paste, or insert graphics from files 4.2 Save the completed web page
5 Preview and print a web page with a browser	5.1 Preview a web page with a browser

	5.2 Print a web page

Unit Range:
This unit covers the knowledge and skills to produce and modify web pages. People working in sales and marketing, education, advertising, the leisure industry, printing and publishing may find this unit useful.

Assessment Guidelines

1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes

1   Learners should have access to a personal computer with suitable web authoring software, text editors, Internet connection and printer.

2   Learners should recognize the ethics and legal responsibility in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT108A, *Navigate and acquire information within the World Wide Web using a browser* is assumed

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Exchange information using emails
Unit Code	GCIT213A
Level	2
Credit	2

Elements of Competency	Performance Criteria
1 Demonstrate knowledge and skills of using webmail tools	1.1 Enter the web address of the selected webmail portal in the browser 1.2 Enter user name and password to login the webmail account 1.3 Distinguish the differences between a webmail and an email software 1.4 Recognize the legal responsibility and information security in using email **Range** Topics may include but are not limited to copyright infringement, privacy, viruses and spyware
2 Install and setup email software	2.1 Install and setup an email software from the media by following instructions 2.2 Add an email account and login the email account with user name and password **Range** Topics may include but are not limited to the use of functions to enable/disable auto login 2.3 Select fonts for outgoing and reply emails 2.4 Use of auto functions to facilitate email communications **Range** Functions may include but are not limited to the use of functions to spell check, auto send/receive and signature
3 Create and send an email **Range**	3.1 Use an email software to create an email **Range**

		Topics may include but are not limited to addressing a message to a single or multiple recipients, together with carbon copy (i.e. CC) function
		Perform operations with webmail tools and email software
	3.2	Enter the subject title that is appropriate to the message content
	3.3	Attach files to the email
	3.4	Send the email
4 Read and reply an email **Range** Perform operations with webmail tools and email software	4.1	Open a received email
	4.2	Open and save attached files
	4.3	Use reply functions to facilitate email communications **Range** Functions may include but are not limited to the use of functions to reply to sender, reply all, reply with original message, reply without original message and forward a message
5 Organise and manage email folders **Range** Include operations with webmail tools and email software	5.1	Manage email folders to organize email messages **Range** Topics may include but are not limited to searching for a message, deleting a message, creating a new mail folder and moving messages to another folder.
	5.2	Sort messages by subject, by date, by sender, by size
6 Create and manage mailing contact lists	6.1	Create a mailing contact list to organise contact persons
	6.2	Manage and use the mailing contact lists **Range** Topics may include but are not limited to selecting multiple recipients from the mailing contact lists

Unit Range
This unit covers the knowledge and skills of using email to exchange information on Internet. Most industries may find this unit useful.

Assessment Guidelines
1 The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on

demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1   Learners should have access to a personal computer with appropriate mail login account, email software and Internet connection.

2   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3   Competence in GCIT108A, *Navigate and acquire information within the World Wide Web using a browser* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Exchange information using instant messaging services
Unit Code	GCIT214A
Level	2
Credit	3

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of the features and uses of an instant messaging service	1.1 Distinguish the differences between the instant messaging services and other form of communications such as email and telephone 1.2 Recognize the features associated with an instant messaging service **Range** Topics may include but are not limited to sending/receiving multiparty instant message, sharing files by download/upload; file formats, file sizes, whiteboard services, interactive voice services, instant voice services, interactive video services and voice/video conference 1.3 Recognize the legal responsibility and information security in using an instant messaging service **Range** Topics may include but are not limited to copyright infringement, privacy, viruses and spyware
2 Connect to an instant messaging service	2.1 Establish connection between a workstation and the instant messaging service **Range** Topics may include but are not limited to entering user login name or identification number, and password according to the service provider's procedures 2.2 Resolve the communication errors where appropriate **Range** Errors may include but are not limited to no

		connection, security access and garbled data
	2.3	Disconnect from the online service
		Range Topics may include but are not limited to the logout and shutdown of an application according to the user procedures
3 Send and receive information with an instant messaging service **Range** May include but is not limited to modification of user details, manage contact list, and contact group	3.1	Select an appropriate contact person from a designated workgroup based on his/her online status
	3.2	Join, invite, accept and reject invitations and quit a multiple party messaging service
	3.3	Operate the instant messaging service functions effectively **Range** Functions may include but are not limited to sending, replying and displaying message and sharing files
4 Make interactive voice communication **Range** May include but is not limited to modification of user details, manage contact list, and contact group	4.1	Select and contact an appropriate person from a designated phonebook based on his/her online status
	4.2	Operate the interactive voice communication device to make interactive voice communication **Range** Topics may include but are not limited to dialling, re-dialling using keypad function, clicking to pick up phone, headphone, microphone and speaker

Unit Range
This unit covers the knowledge and skills of using instant messaging services to exchange information on Internet. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on

outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected.   The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   Learners are required to login to an instant message services with login account to operate basic functions specified in the 3rd element of competency.

Special Notes
1   Learners should have access to a personal computer with Internet connection and instant message login account. The instant message services refer to Internet services such as MSN, ICQ, etc.

2   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3   Competence in GCIT108A, *Navigate and acquire information within the World Wide Web using a browser* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Exchange information using online forums and newsgroups
Unit Code	GCIT215A
Level	2
Credit	3

Elements of Competency	Performance Criteria
1 Recognize the features and uses of online newsgroups	1.1 Distinguish the differences between newsgroups and bulletin board services 1.2 Distinguish the differences between online newsgroups and other form of communications such as email and telephone 1.3 Recognize the features associated with newsgroups **Range** Topics may include but are not limited to viewing and posting messages, categories and subtopics, selecting and deleting a newsgroup subscriptions and attaching files 1.4 Recognize the legal responsibility and information security in using online newsgroups **Range** Topics may include but are not limited to piracy, privacy, enforcement of information security to prevent viruses and spyware
2 Connect to newsgroups to join discussions	2.1 Establish a connection between a workstation and the online service **Range** Topics may include but are not limited to entering user login name, identification number and password according to the service provider's procedures 2.2 Resolve communication errors **Range** Errors may include but are not limited to no connection, security access and garbled data

		2.3	Disconnect from the online service
			Range Topics may include but are not limited to logout and shutdown of an application according to the user procedures for the service
3 Send and receive messages on a newsgroup		3.1	Create and post a message thread on a newsgroup
		3.2	Operate the online service functions to exchange information with others
			Range Functions may include but are not limited to online help, modification of user details, viewing and posting messages or thread, responding to previous posts or thread and forwarding messages to individuals via email

Unit Range
This unit covers the knowledge and skills of using online forums and newsgroups to exchange information on Internet. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   Learners are required to login to a newsgroup/forum with login accounts to operate basic functions.

Special Notes
1   Learners should have access to a personal computer with Internet connection and online computer services.

2   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3   Competence in GCIT108A, *Navigate and acquire information within the World Wide Web using a browser* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title   Demonstrate knowledge and skills of maintaining information security when using the Internet

Unit Code   GCIT301A

Level   3

Credit   3

	Elements of Competency		Performance Criteria
1	Carry out simple risk analysis before using the Internet	1.1	Identify the assets associated with an information system **Range** Topics may include but are not limited to different classification of assets. Physical assets such as computer facilities and software; Logical assets such as data, information, and their date of validity.
		1.2	Identify common threats to an information system **Range** Topics may include but are not limited to technological and people-related threats; structured and unstructured threats
		1.3	Identify vulnerabilities to an information system **Range** Topics may include but are not limited to weakness of the system, lack of controls and lack of risk prevention
		1.4	Prioritise the risks associated with the above factors **Range** Topics may include but are not limited to prioritisation of the risks based on value of assets, scales of threats and levels of vulnerability
2	Identify common threats to an information system when using the Internet	2.1	Identify the technological threats to an information system **Range**

			Threats may include but are not limited to risks associated with virus and worm attack, Trojan and spyware attack and blockage of Internet connection
		2.2	Identify the people-related threats to an information system **Range** Threats may include but are not limited to unauthorised access, attacks from hackers and script kiddies
3	Apply appropriate measures to ensure confidentiality of information when using the Internet	3.1	Select appropriate tools, software and equipment to safeguard the information system **Range** Measures may include but are not limited to encryption, decryption, VPN, tunnel, NAT, encapsulation, e-Cert and SSL, and various security protocols at different layers of OSI
4	Apply appropriate measures to secure the information system from unauthorised access when using the Internet	4.1	Select appropriate tools, software and equipment to safeguard the information system from unauthorised access **Range** Security measures may include but are not limited to NAT, passwords authentication, logoff, shutdown, physical security, anti-virus/Trojan software, anti-spyware, firewall and system patch
5	Apply appropriate measures to ensure the availability of the information system when using the Internet	5.1	Select appropriate tools, software and equipment to safeguard the availability of the information system **Range** Measures may include but are not limited to the use of firewall, IDS, backup/restoration techniques to/from secondary storage media, anti-virus, uninterruptible power supply unit and surge protector
6	Install and operate a firewall before using the Internet **Range** Personal firewall, SOHO firewall	6.1	Identify the protected and unprotected areas of a firewall **Range** Topics may include but are not limited to internal, DMZ and external network of a firewall
		6.2	Install and configure the firewall to protect an information system **Range**

		Topics may include but are not limited to the use of DHCP server, static and dynamic IP address, virtual server, VPN, cables connection and cable adaptors
	6.3	Apply measures to prevent unauthorized access from the external network **Range** Topics may include but are not limited to configuring or setting rules for applications, NAT, preventing DOS attacks and DDoS attacks
	6.4	Apply measures to prevent unauthorized access from the internal network/host **Range** Topics may include but are not limited to applying rules for packet filtering, NAT and rules for applications
	6.5	Troubleshoot the firewall settings with commands **Range** Commands may include but are not limited to PING and NETSTAT
	6.6	Administrate the firewall settings to meet user requirements **Range** Topics may include but are not limited to applying rules for packet filtering, rules for applications; applying audit and enabling audit trails
7 Apply appropriate measures to prevent virus attack	7.1	Ensure the information system is under virus protection **Range** Topics may include but are not limited to system files scan and email scan
	7.2	Update virus signature regularly **Range** Topics may include but are not limited to manual and automatic signature update
	7.3	Upgrade virus protection software regularly **Range** Topics may include but are not limited to manual and automatic virus engine upgrade

	7.4 Ensure the system patch files are up-to-date
	7.5 Identify and select appropriate patch and perform system update to eliminate system vulnerabilities

Unit Range

This unit covers the knowledge and skills of maintaining information security when using the Internet. Most industries may find this unit useful.

Assessment Guidelines

1 The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2 Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3 All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes

1 Learners should have access to a personal computer with appropriate peripherals and Internet connection.

2 Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3 Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Demonstrate an understanding of social implications and contemporary issues of IT
Unit Code	GCIT302A
Level	3
Credit	2

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of ethics related to accessing data held in information systems	1.1 Examine and judge the accuracy, validity and bias of data and information 1.2 Identify the ethical issues related to accessing data held in information systems **Range** Topics may include but are not limited to individual privacy, corporate confidentiality, piracy, intellectual property and copyright, storage, access and exchange of public information 1.3 Identify the legal responsibility associated with ethical issues and its related impacts 1.4 Follow good practices to reduce their impacts **Range** Topics may include but are not limited to following practices from various government agencies and professional bodies
2 Demonstrate an understanding of issues related to health, safety, environment and changes in social environment	2.1 Identify the issues associated with occupational health and safety when using IT and their related impacts **Range** Topics may include but are not limited to ergonomics, computer-related diseases and stress illness 2.2 Identity the environmental issues associated with using IT and their related impacts **Range** Topics may include but are not limited to computer waste, electronics waste, the reuse and recycling of computers and other IT related

	consumables (eg paper, toners)
	2.3 Identify the equity issues associated with IT and their related impacts **Range** Topics may include but are not limited to gender equity, access for disabled and digital divide from local and global perspectives 2.4 Identity the issues associated with the change in nature of work when using IT, and their impacts to society as a whole **Range** Topics may include but are not limited to work monitoring, telecommuting, retraining, outsourcing in IT services and unemployment 2.5 Follow good practices to reduce the above impacts associated with IT **Range** Topics may include but are not limited to practices from various government agencies and professional bodies

Unit Range
This unit covers the issues in ethics, health and safety, environmental, changes in social environment. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

2   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Demonstrate knowledge and skills of using networked operating environment
Unit Code	GCIT303A
Level	3
Credit	4

Elements of Competency	Performance Criteria
1 Build and configure a peer-to-peer network	1.1 Justify the use of a peer-to-peer network 1.2 Detect the status of network interface card(s) 1.3 Use tools (eg GUI) to configure network parameters **Range** Topics may include but are not limited to network addresses and hostnames 1.4 Activate/reactivate the network services
2 Build and configure a server-based network	2.1 Justify the use of a server-based network 2.2 Detect the status of network interface cards 2.3 Use the administrator right to configure network parameters **Range** Topics may include but are not limited to functions to login and logout, create and delete users and apply password control 2.4 Use the administrator right to enable and disable network services **Range** Topics may include but are not limited to file services, web services and mail services

3	Share resources in a networked environment	3.1	Establish network connections according to organisational procedures and guidelines, or other good practices
			Range Topics may include but are not limited to transferring of files across networked environments; the use of functions and tools to open, create and save files across networked environments
		3.2	Use computer names for network connection and drive-mapping
		3.3	Create a folder/directory for sharing, and enable resources sharing
		3.4	Search available resources in a networked environment
			Range Topics may include but are not limited to groups, people, machines, addresses and printers
4	Manage network resources and user accounts effectively	4.1	Use the administrator right to add/delete network accounts according to organisational procedures and guidelines, or other good practices
		4.2	Use the administrator right to manage network resources
			Range Topics may include but are not limited to functions to login/logout, enable encryption, apply password control, disk quota and access rights

Unit Range

This unit covers the knowledge and skills of using networked operating environment. People working in industries and establishments with networked computer system may find this unit useful.

Assessment Guidelines

1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should

provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1   Learners should have access to a personal computer with Internet connection.

2   Learners should recognize the legal responsibility and information security in using network resources.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT108A, *Navigate and acquire information within the World Wide Web using a browser* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Build a Small-Office Home-Office (SOHO) using network components
Unit Code	GCIT304A
Level	3
Credit	3

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of LAN and WAN	1.1 Identify and select appropriate types of LANs to meet user requirements **Range** Topics may include but are not limited to Ethernet, fast Ethernet, Gigibit Ethernet; peer-to-peer networks and, client-server networks 1.2 Identify and select appropriate communication services and media of WAN to meet user requirements **Range** Topics may include but are not limited to ATM, lease lines, Frame Relay; ADSL, cable modem and fibre optics
2 Select appropriate network components to meet user requirements	2.1 Identify and select the off-the-shelf network devices with suitable features **Range** Devices may include but are not limited to ADSL and broadband router, network printer, modem, hub, switch, firewall and wireless access point 2.2 Identify and select a suitable network topology that matches the selected network components **Range** Topology may include but is not limited to star, bus and ring
3 Install and configure network devices and servers	3.1 Install and configure the network devices for network resources sharing 3.2 Configure and enable firewall features of the network devices to protect the network

			Range: topics may include but are not limited to setting up of firewall protection and port-mapping
		3.3	Identify and select suitable services for the network , setup and configure the servers to enable resources sharing
			Range Services may include but are not limited to ftp, web, mail, DNS and DHCP
		3.4	Configure the wireless access point and adaptor to provide network access
			Range Topics may include but are not limited to ad-hoc or infrastructure connections
		3.5	Configure the wireless access point and adaptor to enable security features
			Range Topics may include but are not limited to WEP, MAC filter and encryption
4	Use SOHO network effectively	4.1	Connect to the Internet and share resources within the SOHO network
		4.2	Manage network resources to meet user requirements
			Range Topics may include but are not limited to the user account management, file management, printer management, disk management, application program management and remote access control management

Unit Range
This unit covers the knowledge and skills of building a small network. People working in small-office and home-office (SOHO) may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes

1   Learners should have access to a personal computer with appropriate peripherals and Internet connection.

2   Learners should recognize the legal responsibility and information security in using network resources.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT108A, *Navigate and acquire information within the World Wide Web using a browser* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title   Use handheld devices to improve productivity

Unit Code   GCIT305A

Level   3

Credit   4

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of handheld devices	1.1 Identify and select an appropriate handheld device to meet user requirements **Range** Topics may include but are not limited to CPU performance, screen size and input devices, storage media (eg ROM, RAM, Flash, hard-drive); power consumption, multimedia supports, wireless connectivity, memory utilisation and physical constraints of a handheld device 1.2 Identify and select an appropriate operating system for the handheld device **Range** Topics may include but are not limited to the ease of use, backward compatibility, expandability
2 Use and operate the handheld device effectively for productivity enhancements	2.1 Configure the handheld device for daily operation **Range** Topics may include but are not limited to touch screen calibration, basic user configurations such as setting password, time-zone, backlighting and sound level 2.2 Operate the handheld device by following the manufacturer's guidelines **Range** Topics may include but are not limited to the use of appropriate stylus for touch screen and steps for switching on/off the handheld device 2.3 Manage information storage by following guidelines or good practices

			Range Topics may include but are not limited to the scheduled synchronisation of data/information with desktop machine, backup and restore data
		2.4	Manage the handheld device's resources by following guidelines or good practices **Range** Topics may include but are not limited to memory, CPU and battery life
		2.5	Protect the handheld device from physical damage by following guidelines or good practices **Range** Topics may include but are not limited to the avoidance of dropping and screen scratching, the use of body and screen protector
3	Enter and display information effectively	3.1	Identify and select a suitable and effective method to enter information
		3.2	Enter Chinese and English text with the appropriate input method
		3.3	Use software applications to retrieve and display information **Range** Topics may include but are not limited to contacts, calendar, tasks, notes and inbox mails
4	Use voice recording functions effectively	4.1	Record sound at an appropriate level
		4.2	Save the recorded sound in an appropriate format
		4.3	Playback recorded sound at an appropriate sound level
5	Install and configure software in handheld devices	5.1	Install and setup software applications by following manufacturers' instructions **Range** Topics may include but are not limited to making connection(s) and synchronisation with desktop machines when necessary
		5.2	Configure software applications to meet user requirements
6	Use of office automation software to enhance mobility	6.1	Use a word processing program to manipulate text in a document

	Range Typical software include but are not limited to word processor, spreadsheet and presentation software	6.2	Use a spreadsheet application to manage data and equations in a spreadsheet
		6.3	Use a presentation application to modify and view a presentation document
7	Setup networking features of handheld devices to exchange information	7.1	Configure and enable the wired connections **Range** Topics may include but are not limited to various cable connections with desktop machines
		7.2	Configure and enable the wireless connections **Range** Topics may include but are not limited to connections through Infred-red, Wi-Fi and Bluetooth to desktop machines or Access points
8	Connect to the Internet and use applications to exchange information	8.1	Check the network connection status
		8.2	Use a browser program to navigate web resources
		8.3	Use email tools to exchange information
		8.4	Use instant messaging functions to exchange information

Unit Range
This unit covers the knowledge and skills of using handheld devices to improve productivity. People working in logistic industry and companies with mobile workforce may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1   Learners should have access to a personal computer with appropriate peripherals,

handheld devices and Internet connection.

2   Learners should recognize the legal responsibility and information security in using information and network resources.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT205A, *Maintain and share information using handheld devices* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Produce a design illustration using computer applications
Unit Code	GCIT306A
Level	3
Credit	5

Elements of Competency	Performance criteria
1 Demonstrate an understanding of the principles of computer applications for producing design illustrations	1.1 Identify functions of a computer application for producing design illustrations that meets user requirements **Range** Topics may include but are not limited to vector graphics, raster images, colour depth, line-width, scaling, rotating, colour filling and layers to assist editing 1.2 Select and justify the use of the computer application for illustration design when compare with other graphics editing applications 1.3 Identify and select appropriate input techniques to meet user requirements **Range** Techniques may include but are not limited to digitizing tablet, touch screen and track-ball
2 Plan for producing design illustrations	2.1 Identify and select appropriate steps to create an illustration to meet user requirements **Range** Considerations may include but are not limited to objectives of illustrations, shapes of illustrations, perspective views and 3D views, view angles and drawing size to meet specifications
3 Create a design illustration	3.1 Produce an illustration layout that is consistent with its purposes and familiar to the target audience 3.2 Produce shapes from templates and/or symbol libraries

		3.3	Produce an illustration that meets communication objectives and user requirements
4	Save and exchange the design illustration	4.1	Store the design illustration in suitable storage media
		4.2	Convert the file format of the design illustration to facilitate storage and information exchange
5	Print and output the design illustration	5.1	Print the design illustration with a suitable hardcopy medium that is familiar to the target audience
		5.2	Output the design illustration for other applications **Range** Applications may include but are not limited to image editing software and web-authoring software

Unit Range
This unit covers the knowledge and skills of using computer applications to produce design illustrations. People working in design, engineering and architecture may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   Assessment of this unit should focus on the ability to use the specified tools of a design application, rather than the artistry and creativity of the design produced.

Special Notes
1   Learners should have access to a personal computer with computer aided design (CAD) applications and printer.

2   Learners should recognize the ethics and legal responsibility in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and

learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT207A, *Produce computer graphics by following instructions* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Produce computer graphics using editing applications
Unit Code	GCIT307A
Level	3
Credit	5

Elements of Competency	Performance criteria
1 Demonstrate an understanding of the principles of graphics editing application	1.1 Identify the functions of a graphics editing application for computer graphics that meets user requirements 1.2 Select and justify the use of the graphics editing application when compare with other computer aided design (CAD) applications 1.3 Identify and select appropriate input methods and techniques to meet user requirements **Range** Techniques may include but are not limited to operation of digitizing tablet, pressure sensitive tablet, touch screen and track-ball
2 Plan for producing computer graphics	2.1 Identify and select appropriate steps to create a computer graphics to meet user requirements **Range** Considerations may include but are not limited to expectations from target audience, purposes of visual communications, size of graphics, resolutions, the use of colour, colour tone and style
3 Create a graphic design	3.1 Produce a graphic layout that is consistent with its purpose and familiar to the target audience **Range** Topics may include but are not limited to size, resolution and colour depth 3.2 Open graphics/images for editing **Range** Topics may include but are not limited to multiple files operation, joining, merging, copying, replacing and erasing images

		3.3	Use tools to trace and capture image objects
			Range Topics may include but are not limited to the use of Boolean functions to select, unselect, merge and group image objects
		3.4	Apply functions and special effects to touch up graphics/images/photographs
			Range Topics may include but are not limited to brightness, contrast, γ-value, colour tone, colour retouch, shadow, filtering, sharpening and blurring, twisting, filtering, fade-in and fade-out
		3.5	Produce a graphic design that meets the communication objectives and the user requirements
			Range Topics may include but not limited to adopting suitable background colours/ photographs for the design; selecting, adding or removing text, images and photos to the design
4	Save and exchange the graphic design	4.1	Save the graphic design in suitable storage media
		4.2	Convert the file format of the graphic design to facilitate storage and information exchange
5	Print and output the graphic design	5.1	Print the graphic design with a suitable hardcopy medium that is familiar to the target audience
		5.2	Output the graphic design for other applications
			Range Applications may include but are not limited to web authoring applications, slide show and photo thumb nails
		5.3	Publish the graphic design in a suitable medium that is familiar to the target audience
			Range Media may include but are not limited to web pages and websites, CD /DVD

Unit Range
This unit covers the knowledge and skills of using computer applications to produce computer graphics. People working in sales and marketing, education, advertising, the leisure industry, printing and publishing may find this unit useful.

Assessment Guidelines

1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   The assessment of this unit should focus on the ability to use the specified tools of a graphic design application, however, artistry and creativity of the graphics should also be part of the assessment.

Special Notes

1   Learners should have access to a personal computer, printer and computer application package with the specified design and drawing tools.

2   Learners should recognize the ethics and legal responsibility in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT207A, *Produce computer graphics by following instructions* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title   Produce a multimedia application using computer devices and applications

Unit Code   GCIT308A

Level   3

Credit   5

Elements of Competency	Performance criteria
1 Demonstrate an understanding of the principles of multimedia authoring software	1.1 Identify the functions of a computer application for producing multimedia application that meets user requirements 1.2 Select and justify the use of the multimedia application when compare with other image-editing applications **Range** Topics may include but are not limited to interactive information, association of different media to provide rich information
2 Demonstrate an understanding of the nature of multimedia elements	2.1 Recognise features of different multimedia elements **Range** Topics may include but are not limited to • text: characters with different fonts, text objects and symbols; • graphics: charts, photos; video: movie and animation; • audio: sound effect, music and speech 2.2 Identify and select appropriate multimedia elements to meet user requirements 2.3 Identify and select appropriate techniques to create multimedia elements **Range** Topics may include but are not limited to techniques for editing and digitising text, graphics, sound and video
3 Plan for producing multimedia applications	3.1 Recognise features of different storage media for distribution **Range** Features may include but are not limited to

			physical size, cost, popularity, life span, storage capacity and reliability
		3.2	Identify and select appropriate steps to create a multimedia application to meet user requirements
			Range Considerations may include but are not limited to expectations from target audience, purposes of media communications, balance between storage and quality, compression, encoding and decoding, ease-of-use and interactive features
4	Capture and collect multimedia elements	4.1	Identify and select appropriate multimedia capture peripherals
			Range Topics may include but are not limited to DC, DV, webcam, video and TV capture devices/systems
		4.2	Operate the peripherals to capture multimedia elements to meet user requirements
		4.3	Search and collect multimedia elements from appropriate sources and libraries
			Range Topics may include but are not limited to searching objects, background pictures, sound effects, soundtracks and movie clips from various websites and multimedia libraries
5	Edit and compose multimedia elements	5.1	Identify and select appropriate multimedia authoring/editing applications
		5.2	Operate on multimedia authoring/editing applications to edit/compose multimedia elements to meet user requirements
			Range Topics may include but are not limited to the functions to edit, merge, join, split, cut and compose multimedia elements; subtitles, screen-in-screen, special transition effect, sound and voice synchronisation
6	Save and exchange the multimedia application	6.1	Store the multimedia application in suitable storage media
		6.2	Convert the file format of the multimedia application to facilitate storage and information exchange
7	Output and publish the	7.1	Apply appropriate steps to output the contents

multimedia application	of the multimedia application suitable for distribution **Range** Topics may include but are not limited to file conversion, re-sampling, sub-sampling, encoding, decoding, joining and splitting 7.2 Publishing the contents of the multimedia application in appropriate storage media that are familiar to the target audience **Range** Media may include but are not limited to Flash memory, CD/DVD

Unit Range

This unit covers the knowledge and skills of using computer devices and applications to produce a multimedia application. People working in sales and marketing, education, advertising, the leisure industry, printing and publishing may find this unit useful.

Assessment Guidelines

1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   The assessment of this unit should focus on the ability to use the multimedia peripherals specified tools of the computer application, however, artistry and creativity of the multimedia applications should also be part of the assessment.

Special Notes

1   Learners should have access to a personal computer, multimedia peripherals and computer application package with the specified design and drawing tools.

2   Learners should recognize the ethics and legal responsibility in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT207A, *Produce computer graphics using editing applications* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title   Produce animation using computer applications

Unit Code   GCIT309A

Level   3

Credit   5

Elements of Competency	Performance criteria
1 Demonstrate an understanding of the principles of computer applications for producing animation	1.1 Identify functions of a computer application for producing animation that meets user requirements 1.2 Select and justify the use of the computer application for creating animation when compare with other image-editing applications **Range** Constraints may include but are not limited to performance of computer systems and display cards, computer networks and storage capacity of the publish media 1.3 Identify and select appropriate input techniques to create animation **Range** Techniques may include but are not limited to operation of digitizing tablet, touch screen, track-ball, DC, DV, scanner, microphone, tools and features provided by computer software
2 Plan the steps for producing animation	2.1 Identify and select appropriate steps to create animation to meet user requirements **Range** Considerations may include but are not limited to meeting objectives of the animation, techniques of using a series of images, animated objects, frames, begin and end frames, in-between frames and special effects such as morphing 2.2 Use storyboards to facilitate animation planning **Range** Topics may include but are not limited to using multiple frames in a storyboard to define messages for users, and time allocation for

	actions
3 Create an animation with animated entities	3.1 Produce animation that is consistent with its purpose and familiar to the target audience 3.2 Create animated entities with the aid of software tools **Range** Topics may include but are not limited to using multiple and tweening frames, creating empty frame, copying, deleting and inserting frames 3.3 Search, collect multimedia elements and animated entities from appropriate sources and libraries **Range** Topics may include but are not limited to searching objects, background pictures, sound effects, soundtracks and movie clips from various websites and multimedia libraries 3.4 Create composite animated entities with synchronized audio and visual effects that is consistent with the themes of the animation 3.5 Produce animation that meets the communication objectives and other user requirements **Range** Topics may include but are not limited to the use of layers, masking features, symbols, buttons controls; importing graphics and converting text into graphics
4 Save and exchange the design	4.1 Store the animation in suitable storage media 4.2 Convert file format of the animation to facilitate storage and information exchange
5 Output and publish the animation	5.1 Apply steps to output the animation suitable for distributions **Range** Topics may include but are not limited to web pages and other multimedia applications 5.2 Publishing the contents of the animation in appropriate storage media **Range** Media may include but are not limited to Flash memory, CD and DVD

Unit Range

This unit covers the knowledge and skills of using computer applications to produce animations. People working in sales and marketing, education, advertising, the leisure industry, printing and publishing may find this unit useful.

Assessment Guidelines

1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   The assessment of this unit should focus on the ability to use the specified tools of an animation design application, however, artistry and creativity of the animation should also be part of the assessment.

Special Notes

1   Learners should have access to a personal computer with appropriate peripherals, printer and computer application package with the specified design and tools to create animations.

2   Learners should recognize the ethics and legal responsibility in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT207A, *Produce computer graphics using editing applications* is assumed

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title   Produce word processing documents to meet user requirements

Unit Code   GCIT310A

Level   3

Credit   3

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of using word processing application to meet user requirements	1.1 Identify and select appropriate tools to meet user requirements **Range** Topics may include but are not limited to key features of the user requirements
2 Format a document effectively	2.1 Compare and trace documents to meet user requirements **Range** Topics may include but are not limited to track changes, accept or reject changes 2.2 Format text to meet user requirements **Range** Topics may include but are not limited to functions to find and replace format of text, create and edit styles of headings and content 2.3 Create an outline for indexing to meet user requirements **Range** Topics may include but are not limited to table of contents, glossary, index and appendices 2.4 Create multiple column text to meet user requirements **Range** Topics may include but are not limited to the space between columns and balancing the columns 2.5 Insert comments, footnotes, endnotes, headers and footers into a document to meet user requirements

			Range Topics may include but are not limited to the use of different headers and footers for different sections
		2.6	Insert hyperlinks to the selected text to meet user requirements
3	Create and edit objects effectively	3.1	Use drawing tools to create and edit diagrams **Range** Topics may include but are not limited to creating basic shapes, the use of graphical text, the use of shapes from libraries; functions to crop, resize, rotate, group and ungroup graphics and shapes
		3.2	Create and edit charts, tables to meet user requirements **Range** Topics may include but are not limited to creating organization charts, Venn Diagrams and producing formatted tables for different purposes
4	Produce a set mail merged documents	4.1	Use address information to create a set mail merged documents **Range** Topics may include but are not limited to setting up of main documents, creating data source fields and producing merged letters
5	Create and use a macro command to enhance productivity .	5.1	Create and save a macro to customize word processing operations **Range** Topics may include but are not limited to functions to automate data entry and formatting
		5.2	Record the name and description of the macro command for documentation purpose
		5.3	Retrieve and run the saved macro to perform preset actions
6	Create and use a document template effectively	6.1	Identify and select a suitable template to prepare the theme of the document
		6.2	Apply, modify or create a template to meet user requirements
7	Save and print the document to meet user requirements	7.1	Save the document in different formats

	Range
	Topics may include but are not limited to saving files with password protection and in file format such as web page
	7.2 Print the document to meet user requirements
	Range
	Topics may include but are not limited to the effective use of preview, printer selection, page setup, double sides printing, number of pages on a sheet, and number of copies; image printing file creation

Unit Range

This unit covers the skills of using a word processing application to meet user requirements in general office environment. Most industries may find this unit useful.

Assessment Guidelines

1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing.   Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected.   The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes

1   Learners should have access to a personal computer with appropriate word processing software, and printer.

2   Learners should recognize the legal responsibility and information security in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT208A, *Produce word processing documents by following instructions* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Produce spreadsheets to meet user requirements
Unit Code	GCIT311A
Level	3
Credit	3

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of using spreadsheet to solve problems	1.1 Identify and select appropriate functions to solve the problems **Range** Topics may include but are not limited to key features of the user requirements, the nature of data and information
2 Format and manipulate a spreadsheet effectively	2.1 Customize data format of cells to meet user requirements **Range** Formats may include but are not limited to text, number, date and time 2.2 Insert comments, headers and footers, apply tracking changes, accept or reject changes to meet user requirements 2.3 Use tools and functions to manipulate a large spreadsheet **Range** Topics may include but are not limited to splitting a window, freezing a column or row, hiding a column or row 2.4 Apply links to other worksheets to meet user requirements **Range** Topics may include but are not limited to calculations within linked worksheets and 3D references 2.5 Insert hyperlinks to selected cells to meet user requirements 2.6 Use functions and tools to search data and cells in a large spreadsheet

3	Apply formulas in a spreadsheet to solve problems	3.1	Use statistical, financial and logical functions to perform calculations **Range** Topics may include but are not limited to the use of logical and lookup functions in a three dimensional workspace; inserting date and time, 'is blank' function, 'goal seeking' function and conditional format
		3.2	Use sorting and absolute cell referencing in calculations
4	Create and edit objects effectively	4.1	Select and insert diagrams from files or graphic libraries to meet user requirements
		4.2	Use drawing tools to create and edit diagrams **Range** Topics may include but are not limited to creating graphical text and basic shapes, the use of shapes from library; the functions to resize, rotate, group and ungroup graphics and shapes
		4.3	Create and edit charts to meet user requirements **Range** Topics may include but are not limited to organization charts and Venn Diagrams
5	Produce and use a macro command to enhance productivity	5.1	Create and save a macro to customize spreadsheet operations **Range** Topics may include but are not limited to functions to automate data entry and calculations
		5.2	Record the name and descriptions of the macro command for documentation purpose
		5.3	Retrieve and run the saved macro to perform preset actions
6	Use a spreadsheet template effectively	6.1	Identify and select a suitable template that meet user requirements
		6.2	Apply, modify or produce a template to meet user requirements
7	Save and print the spreadsheet in different formats	7.1	Save the spreadsheet in different formats **Range** Topics may include but are not limited to

	saving files with password protection and in format such as web page
	7.2 Print the selected spreadsheet to meet user requirements
	Range Topics may include but are not limited to the effective use of preview, printer selection, page setup, double sides printing, partial printing of the worksheet with printing titles on each sheet and image printing file creation

Unit Range
This unit covers the skills of using spreadsheet to meet user requirements in general office environment. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1   Learners should have access to a personal computer with appropriate spreadsheet software, and printer.

2   Learners should recognize the legal responsibility and information security in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT209A, *Produce spreadsheets by following instructions* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Produce presentations to meet user requirements
Unit Code	GCIT312A
Level	3
Credit	3

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of using presentation application to meet user requirements	1.1 Identify and select an appropriate presentation tool to meet user requirements **Range** Topics may include but are not limited to key features of the user requirements
2 Create and use a presentation template effectively	2.1 Identify and select a suitable template to prepare the theme of the presentation 2.2 Use, modify or produce a template to meet user requirements **Range** Topics may include but are not limited to modifying a colour scheme on slides, notes pages or handout pages, changing of background and producing a master slide for a presentation
3 Create and edit objects effectively	3.1 Use drawing tools to draw and edit diagrams **Range** Topics may include but are not limited to creating basic shapes, using graphical text, using shapes from libraries; functions to resize, rotate, group and ungroup of graphics and shapes 3.2 Create and edit charts, tables to meet user requirements **Range** Topics may include but are not limited to organization charts and Venn Diagrams
4 Manipulate animation effects and multimedia effectively	4.1 Add interactive animation effects to text and objects to meet user requirements **Range**

			Topics may include but are not limited to sequence, motion path, auto reverse, sound, advanced time line and interactive animated entities
		4.2	Add sound, multimedia and video entities to slides to meet user requirements **Range** Topics may include but are not limited to functions to insert hyperlinks, sound and animated entities to objects or action buttons
5	Customize presentations effectively	5.1	Create and modify the customized slide show to meet user requirements **Range** Topics may include but are not limited to reordering and hiding slides, the use of presentation viewer software to operate a presentation at other computers
6	Use tools and functions to review presentations	6.1	Add comments to the presentation slides to help others to review
		6.2	Share the presentation for others to review **Range** Topics may include but are not limited to email, shared work space and virtual meeting
		6.3	Compare, merge and review the presentation to meet user requirements
7	Save and print presentations to meet user requirements	7.1	Save the presentation document in different formats **Range** Topics may include but are not limited to saving files with password protection and in file format such as web pages
		7.2	Print the presentation document to meet user requirements **Range** Topics may include but are not limited to the effective use of preview, select printer, page setup, double sides printing, number of slides on a sheet, and number of copies; print to an image file

Unit Range
This unit covers the skills of using presentation to meet user requirements in general office environment. Most industries may find this unit useful.

Assessment Guidelines

1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes

1   Learners should have access to a personal computer with appropriate presentation software, and printer.

2   Learners should recognize the legal responsibility and information security in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT210A, *Produce presentations by following instructions,* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Create and maintain a database to meet user requirements
Unit Code	GCIT313A
Level	3
Credit	5

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of using a database to solve problems	1.1 Identify and select appropriate database functions to solve problems **Range** Topics may include but are not limited to the nature of information and key features of the user requirements
2 Create a database using a database application program	2.1 Create a database to meet user requirements **Range** Topics may include but are not limited to different ways of creating tables, defining field properties for each field and selecting a primary key for a table 2.2 Save and close the database **Range** Topics may include but are not limited to password protection
3 Manipulate a database effectively	3.1 Add and delete, navigate, and edit records in the database to meet user requirements **Range** Topics may include but are not limited to importing records from other applications, expanding a sub-datasheet, searching for a record, sorting records and using form to navigate and modify records 3.2 Hide, move, add and delete fields in the database to meet user requirements 3.3 Create validation rules for different fields to meet user requirements **Range**

			Topics may include but are not limited to the use of input constrains
		3.4	Create relationships between tables of the database to meet user requirements **Range** Topics may include but are not limited to referential integrity
4	Maintain a database effectively	4.1	Restructure the fields of the database to meet user requirements **Range** Change name and characteristics of a field of the database
		4.2	Format the fields of the database to meet user requirements **Range** Topics may include but are not limited to currency, date, time and percentage
		4.3	Modify a form of the database to meet user requirements
5	Apply functions and use database language to solve problems	5.1	Use filter to select required records to meet user requirements
		5.2	Use queries tools to solve problems **Range** Tools may include but not limited to fields from multiple tables; using wildcards for selection of text; use comparison operators (eg =, <>, <=, >=, <, >); using compound criteria; using sorting in a query; using calculated fields in a query; calculating statistics (eg sum, average)
		5.3	Use database language to solve problems **Range** Topics may include but are not limited to commands of SQL such as CREATE TABLE, CREATE INDEX, SELECT, INSERT, UPDATE, DELETE and DISTINCT
6	Produce and use a macro command to enhance productivity	6.1	Create and save a macro to customize database operations **Range**

	Topics may include but are not limited to functions to automate data entry
	6.2 Record the name and description of the macro command for documentation purpose
	6.3 Retrieve and run the macro to perform preset actions
7 Create a report to present selected data	7.1 Identify and select fields of the database to be included in a report
	Range Topics may include but are not limited to grouping data in a report
	7.2 Use and modify the report layout to meet user requirements
	Range Topics may include but are not limited to adding headers and footers and modifying field attributes
	7.3 Preview and print a report of the database to meet user requirements
	Range Topics may include but are not limited to the effective use of preview, printer selection, page setup, double sides printing and image printing file creation

Unit Range
This unit covers the skills of using database to meet user requirements in general office environment. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes

1   Learners should have access to a personal computer with database application software, and printer.

2   Learners should recognize the legal responsibility and information security in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT211A, *Use basic functions of a database program* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Demonstrate integrated use of common office automation application software
Unit Code	GCIT314A
Level	3
Credit	3

Elements of Competency	Performance Criteria
1 Share information among different office automation applications **Range** Distinguish between embedded objects and linked objects when inserting objects	1.1 Merge a main word processing document with different data source documents **Range** Topics may include but are not limited to the use of a main document to produce a letter for multiple recipients by merging with a database file or a spreadsheet 1.2 Insert and format spreadsheet data/graph(s) into a word processing document 1.3 Insert and format spreadsheet data/graph(s) into a presentation 1.4 Insert and format tables of a word processing document into a presentation 1.5 Convert the presentation contents into a word processing document 1.6 Produce a database table by importing spreadsheet data **Range** Topics may include but are not limited to linking a spreadsheet to a database
2 Save and print files to meet user requirements	2.1 Save the output file in an appropriate format for exchange 2.2 Preview, adjust and modify settings to meet user requirements 2.3 Print the output file in a suitable hardcopy medium that is familiar to the target audience **Range** Topics may include but are not limited to

	mailing label and pre-printed letter

Unit Range

This unit covers the skills of integrated use of office automation applications. Most industries may find this unit useful.

Assessment Guidelines

1. The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2. Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3. All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4. Learners are required to create, modify and print a document from given instructions.

Special Notes

1. Learners should have access to a personal computer with appropriate office automation software, and printer.

2. Learners should recognize the ethics and legal responsibility in using information.

3. Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4. Competence in GCIT208A, *Produce word processing documents by following instructions*, GCIT209A*, Produce spreadsheets by following instructions*, GCIT210A, *Produce presentations by following instructions* and GCIT211A, *Use basic functions of a database program* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Produce an interactive website to meet user requirements
Unit Code	GCIT315A
Level	3
Credit	4

Elements of Competency	Performance Criteria
1 Demonstrate knowledge and skills in planning an interactive website	1.1 Identify the purpose of the website to meet user requirements **Range** Topics may include but are not limited to target audience, purpose, content and information, constrains and limitations 1.2 Identify and select an appropriate method to produce an interactive website **Range** Topics may include but are not limited to using HTML or website authoring tools 1.3 Produce sitemap draft to assist planning of the website **Range** Topics may include but are not limited to the default page, menus, hierarchy, links between web pages, site guides, contact information and FAQ pages
2 Produce an interactive website according to the user requirements	2.1 Use appropriate tools to produce a website with interactive features **Range** Topics may include but are not limited to text formatting, the use of hyperlinks, Cascading Style Sheet, frames, forms and tables; interactive media and typography, hit counter, search functions, on-line product catalogue, membership registration and login 2.2 Insert appropriate graphics, images, animation and sound from libraries to enhance the website **Range**

			Topics may include but are not limited to the use of colour, background images, animation and background music
3	Manipulate audio in enhancing web pages effectively	3.1	Select, modify or produce digitized audio files to meet the design requirements **Range** Topics may include but are not limited to direct capture, analog and digital conversion, sampling frequency implications
		3.2	Adjust and convert audio files to appropriate formats **Range** Topics may include but are not limited to mixing, trimming, combining and converting file formats
4	Manipulate video in enhancing web pages effectively	4.1	Select, modify or produce digitized video files to meet the design requirements **Range** Topics may include but are not limited to direct capture by digital video and digital camera, analog and digital conversion, video aspect ratio, video and audio synchronisation, the use of streaming format
		4.2	Adjust and convert video files to appropriate formats **Range** Topics may include but are not limited to trimming, combining, adding transitions, subtitles and narrative
5	Manipulate animation and graphics in enhancing web pages effectively	5.1	Select, modify or produce animated entities with appropriate software to meet the design requirements
		5.2	Select, modify or produce graphics with appropriate software to meet the design requirements
6	Test and maintain the website	6.1	Preview and test the website
		6.2	Publish the website by uploading files to appropriate locations
		6.3	Modify and update the website to meet user requirements

Unit Range:

This unit covers the knowledge and skills to produce and maintain websites. People working in sales and marketing, education, advertising, the leisure industry, printing and publishing may find this unit useful.

Assessment Guidelines

1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   The assessment of this unit should focus on the ability to apply multimedia on the website construction, however, artistry and creativity of the website should also be part of the assessment.

Special Notes

1   Learners should have access to a personal computer with suitable web authoring software, text editors, Internet connection and printer.

2   Learners should recognize the ethics and legal responsibility in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT212A, *Modify and produce a web page with tools by following instructions,* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Operate Internet services with computer applications
Unit Code	GCIT316A
Level	3
Credit	3

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of functions and usages of Internet services	1.1 Identify and select appropriate Internet services to meet user requirements **Range** Topics may include but are not limited to FTP services, webcasting services, Internet Phone services, video conference services, blogs, web-hosting, web/electronic album and virtual drives
2 Use software to access Internet services effectively	2.1 Setup and configure client software to meet user requirements **Range** Topics may include but are not limited to browsers, media player software and voice/Internet Phone client software 2.2 Subscribe to the appropriate Internet services **Range** Topics may include but are not limited to adding of user ID and passwords, personal details, selection of user groups and privilege 2.3 Login/logout Internet services with appropriate authentication steps **Range** Topics may include but are not limited to user name, user account number, password or other information 2.4 Operate Internet services to access, acquire and exchange information **Range** Topics may include but are not limited to the download and upload of information, viewing video, communication via interactive text and whiteboard, the use of voicemail and

	administrate account
3 Maintain information security effectively when using the Internet services	3.1 Apply appropriate measures to ensure confidentiality of information when using Internet services
	3.2 Apply appropriate measures to prevent unauthorised access when using Internet services

Unit Range
This unit covers the skills of using Internet services, such as FTP, webcasting, blogs and Internet Phone services, to access, acquire and exchange information. Most industries may find this unit useful.

Assessment Guidelines
1 The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2 Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3 All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1 Learners should have access to a personal computer with appropriate Internet access and application software.

2 Learners should recognize the ethics and legal responsibility in using information.

3 Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4 Competence in GCIT108A, *Navigate and acquire information within the World Wide Web using a browser* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Demonstrate an understanding of professional conducts when using IT to support organisational functions
Unit Code	GCIT401A
Level	4
Credit	4

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of the roles of IT management in an organisation	1.1 Identify the purposes of IT management **Range.** Topics may include but are not limited to planning, control and evaluation 1.2 Identify IT management tasks **Range** Topics may include but are not limited to planning for purchase, maintenance and replacement; control of access, evaluation of cost-benefit, performance and software asset management (SAM), information security and human resource; audit 1.3 Identify risks in business continuity associated with IT systems during disasters and reduce its associated risks **Range** Topics may include but are not limited to controls and preventions in various disasters such as fire, power blackout 1.4 Follow corresponding disaster recovery plan to minimise impacts of disasters
2 Demonstrate an understanding of issues related to occupational health and safety in using IT systems	2.1 Identify issues associated with occupational health and safety in using IT systems **Range** Topics may include but is not limited to health problems for prolonged computer users such as eye protection, viewing angle and distance, proper posture when using a computer; keyboard height and repetitive stress injuries (RSI)

		2.2	Identify impacts of malpractice to organisation and society as a whole
		2.3	Follow the code of practice or guidelines for IT users according to organisational policy to maintain and improve occupational health and safety
3	Demonstrate an understanding of issues related to environment when using IT systems	3.1	Identify environmental issues in using IT **Range** Topics may include but are not limited to computer waste, electronics waste, reuse and recycling of equipment and computers, energy consumption and paperless society
		3.2	Identify impacts of pollution to an organisation and society as a whole and associated responsibilities
		3.3	Follow the code of practice or guidelines for IT users according to organisational policy to improve environmental protection
4	Demonstrate an understanding of ethics related to changes in social environment	4.1	Identify equity issues relating to IT **Range** Topics may include but are not limited to gender equity, access and exchange of information, access for disabled and digital divide from local and global perspectives
		4.2	Identify the impacts of social issues to an organisation and society as a whole and associated legal responsibility **Range** Topics may include but are not limited to equity and privacy
		4.3	Identify the issues in changing the nature of works relating to IT **Range** Topics may include but are not limited to work monitoring, telecommuting and retraining, outsourcing routine tasks to overseas centres and unemployment
		4.4	Follow the code of practice or guidelines for IT users according to organisational policy to minimise their impacts
5	Demonstrate an understanding of the key features of legislation	5.1	Identify key legislations relating to IT in Hong Kong

relating to IT	**Range** Legislations may include but are not limited to intellectual property and copyright, privacy, discrimination, occupational health and safety, and computer related crime 5.2 Identify impacts of dishonesty or fraudulent practices to an organisation and society as a whole and associated legal responsibility **Range** Topics may include but are not limited to piracy, illegal download, fraudulent websites, junk mails and unauthorised access 5.3 Follow the code of practice or guidelines for IT users according to organisational policy to prevent malpractice and illegal activities

Unit Range
This unit covers professional conducts of using IT to support organisational functions. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

2   Competence in GCIT302A, *Demonstrate understanding of social implications and contemporary issues of IT* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Select and administrate computer systems and networks to support organizational functions
Unit Code	GCIT402A
Level	4
Credit	5

Elements of Competency	Performance Criteria
1 Select appropriate computer systems to support organisational functions	1.1 Evaluate requirements of computer systems to meet organisational functions **Range** Topics may include but are not limited to functional requirements and need analysis document and computer specification documents 1.2 Identify and select suitable computer systems to meet organizational functions **Range** Topics may include but are not limited to capital and maintenance cost, reliability, compatibility, expansibility, maintenance support, operating environment support and ease-of-use
2 Select appropriate computer networks to support organisational functions	2.1 Evaluate requirements of computer networks to meet organisational functions **Range** Topics may include but are not limited to functional requirements and need analysis document, network diagram documents and network specification documents 2.2 Identify and select suitable computer networks to meet organizational functions **Range** Topics may include but are not limited to one-time and recurring cost, access network, core network, wireless network, network topology, network security, network reliability, distance, performance, load balancing, hierarchy, VLAN, multicast technology and multimedia backbone
3 Use technical supports effectively to enhance	3.1 Identify elements and roles of computer and network supports to meet organizational

	productivity	functions **Range** Topics may include but are not limited to installation and configuration, supports for critical business functions, backup and restoring data; day-to-day operations, helpdesk services and the outsource of technical supports. 3.2 Use end-user supports, training and documentation to meet organizational functions
4	Manage the computer and network resources using network management functions	4.1 Identify elements in network management to meet organizational functions Range Topics may include but are not limited to performance monitoring, failure handling, configuration, trouble shooting, security monitoring and account monitoring 4.2 Identify components in network management Range Topics may include but are not limited to managed objects, network manager, management information base, network management protocol and trouble shooting tools 4.3 Use commands or graphic user interface to manage computers and network resources to meet organizational functions
5	Plan for further expansion to meet organizational functions	5.1 Collect data for performance analysis by using GUI or automatic functions **Range** Topics may include but are not limited to fault reports, performance data, numbers of connections, user complaints and traffic utilisation 5.2 Identify factors and requirements to meet organisational functions, and justify for future expansions **Range** Topics may include but are not limited to scalability and adaptability

Unit Range
This unit covers the knowledge and skills of selecting and administrating computer systems and networks to support organisational functions. Most industries may find this unit useful.

Assessment Guidelines

1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

2   Learners should recognize the legal responsibility and information security in using information and network resources.

3   Competence in GCIT303A, *Demonstrate knowledge and skills in using networked operating environment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Operate and maintain a database to support organizational functions
Unit Code	GCIT403A
Level	4
Credit	3

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of database application in supporting organizational functions	1.1 Identify features of database management systems (DBMS) for an organization **Range** Topics may include but are not limited to DBMS, database connectivity, data dictionary, tables, keys and indexes 1.2 Identify the logical design of a database application for an organization **Range** Topics may include but are not limited to features of a relational model and entity relationship (ER) diagram 1.3 Identify consistency between logical and physical design of a database application for an organization 1.4 Identify requirements of a database application in supporting client/server features **Range** Topics may include but are not limited to reliability, performance, the use of hierarchical design and distributed database
2 Operate a database effectively	2.1 Identify and select a database language to meet organizational needs **Range** Topics may include but are not limited to the use of SQL 2.2 Create macro to customize and automate a database to meet organizational functions **Range**

		Topics may include but are not limited to retrieving the saved macro to perform preset actions and modifying a saved macro
3 Manage a database effectively	3.1	Implement data control of a database to meet organizational needs **Range** Topics may include but are not limited to data administration, access, shared use; considerations for security, integrity, privacy and reliability
	3.2	Maintain information security of a database to meet organizational needs **Range** Topics may include but are not limited to information security in DBMS, transaction supports, concurrency controls and database recovery
4 Evaluate the effectiveness of a database application	4.1	Evaluate the cost-effectiveness of the database application **Range** Topics may include but are not limited to the data collection and surveys from users
	4.2	Perform a risk analysis associated with the database application
	4.3	Identify appropriate improvements to meet the future needs of the organization

Unit Range
This unit covers the knowledge and skills of maintaining a database to support organisational functions. People working in sales and marketing, education, finance, medical may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the

specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1   Learners should have access to a personal computer with database application software, and printer.

2   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3   Learners should recognize the legal responsibility and information security in using information and the database.

4   Competence in GCIT313A, *Create and maintain a database to meet specific user requirements* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Solve statistical and quantitative problems using computer applications
Unit Code	GCIT404A
Level	4
Credit	4

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of using computer applications to solve statistical and quantitative problems	1.1 Identify key features of the statistical and quantitative problems **Range** Problem domains may include but are not limited to market research, financial problems, data mining and statistical problems 1.2 Identify and select an appropriate computer application to solve the problems **Range** Topics may include but are not limited to the use of appropriate statistical application software, accuracy, reliability and ease-of-use
2 Install and configure computer applications	2.1 Install and setup the computer application from media by following manufacturer's instructions 2.2 Configure the computer application to meet organisational needs
3 Use statistical functions of computer applications to solve the problem effectively	3.1 Follow appropriate steps to solve the problem **Range** Steps may include but are not limited to planning, data collection, data analysis and sharing of results 3.2 Use appropriate statistical techniques to analyse data **Range** Topics may include but are not limited to descriptive statistics, hypothesis testing and regression analysis 3.3 Use appropriate statistical functions to perform statistical and quantitative analysis

		Range Topics may include but are not limited to Chi-square and t- test, correlation and regression analysis and ANOVA	
		3.4	Generate results to help others to interpret and evaluate the solutions
			Range Results may include but are not limited to tables and reports, charts and graphs
4	Print and export results in appropriate formats	4.1	Print the analyzed results in an appropriate format familiar to the target audience
		4.2	Export the results to other applications
			Range Topics may include but are not limited to the exchange of information with other applications

Unit Range

This unit covers the knowledge and skills of using computer applications to solve statistical and quantitative problems. People working in sales and marketing, education, finance, data-mining may find this unit useful.

Assessment Guidelines

1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4   Learners are required to solve a scenario problem.

Special Notes

1   Learners should have access to a personal computer with appropriate statistical application software, and printer.

2   Learners should recognize the legal responsibility and information security in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and

learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Produce spreadsheets to support organisational functions
Unit Code	GCIT405A
Level	4
Credit	4

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of using spreadsheets to solve quantitative problems	1.1 Identify key features of the specific problems **Range** Problem domains may include but are not limited to market research, financial problems, data mining, statistical problems, human resources, budgeting and inventory 1.2 Identify and select functions in a spreadsheet to solve the problems **Range** Topics may include but are not limited to accuracy, reliability, ease-of-use and cost effectiveness
2 Design the layout of a spreadsheet to meet the organisational needs	2.1 Follow appropriate steps to create a spreadsheet layout **Range** Topics may include but are not limited to planning, data collection, data analysis, sharing of results and presentation 2.2 Design and create different data tables to analyze given data **Range** Topics may include but are not limited to customizing data format in cells and adding an input pointer using conditional formatting 2.3 Create a database in a spreadsheet to solve the problem **Range** Topics may include but are not limited to the use of a data entry form to view and find records, enter and change data

3	Apply formulas and functions of spreadsheet to meet organisational needs	3.1	Analyse the given quantitative problem and derive formulas to solve the problem
			Range Topics may include but are not limited to financial, statistical and mathematical formulas
		3.2	Identify and select statistical, financial, logical and database functions to calculate the required solution
			Range Topics may include but are not limited to the use of financial, 'what if', 'is blank' and lookup functions
		3.3	Apply formulas to operate the data tables
			Range Topics may include but are not limited to the use of macro
		3.4	Extract records from the worksheets according to criteria set
			Range Topics may include but are not limited to the use of filter and multiple comparison criteria
		3.5	Check the accuracy of formulas and data integrity of the worksheets
			Range Topics may include but are not limited to the use of sample calculations
		3.6	Generate results to help others to interpret and evaluate the solutions
			Range Results may include but are not limited to tables, charts and graphs in various formats
4	Enhance the layout of a spreadsheet to meet organizational needs	4.1	Customize the layout according to the design specifications
			Range Topics may include but are not limited to the use of graphs, diagrams and tables where appropriate
		4.2	Protect cells and workbook with passwords where appropriate
5	Save and print reports	5.1	Save the spreadsheet in an appropriate report

	format
	5.2 Print the spreadsheet in an appropriate format that is familiar to the target audience

Unit Range

This unit covers the knowledge and skills of using spreadsheet to support organisational functions. People working in sales and marketing, manufacturing, business administration, education, finance, data-mining may find this unit useful.

Assessment Guidelines

1 The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2 Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3 All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4 Learners are required to solve a scenario problem by creating a spreadsheet.

Special Notes

1 Learners should have access to a personal computer with appropriate spreadsheet software, and printer.

2 Learners should recognize the legal responsibility and information security in using information and spreadsheet.

3 Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4 Competence in GCIT311A, *Produce spreadsheets to meet specific user requirements* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Produce desktop publishing documents to support organisational functions
Unit Code	GCIT406A
Level	4
Credit	4

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of the publishing documents and layout requirements	1.1 Identify features of the documents in accordance with the specifications for the organizational use **Range** Topics may include but are not limited to purposes of the documents, target audience, limitations and constraints in technologies and cost 1.2 Identify and select an appropriate desktop publishing application for the publishing documents 1.3 Propose an appropriate plan for document publishing to meet specifications **Range** Topics may include but are not limited to the layout, fonts type and size, colour, paper size, quantity and cost
2 Produce the documents in accordance with specifications	2.1 Format the text in accordance with specifications **Range** Topics may include but are not limited to page layout, balance proportion, harmony and sequence; effective communication, readability, legibility, colour matching, presentation and accuracy 2.2 Add appropriate graphics and other enhancements to the documents **Range** Topics may include but are not limited to functions to capture and edit digital images

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		2.3	Layout the documents in accordance with specifications
			Range Layouts may include but are not limited to magazines, booklets and brochures
		2.4	Save the documents in an appropriate format
			Range Formats may include but are not limited to the proprietary image format
3	Print and verify the publishing documents	3.1	Verify the printed documents to prevent mistakes
			Range Topics may include but are not limited to editing and the proof-read of the draft to meet the specifications
		3.2	Print the documents in accordance with specifications
			Range Topics may include but are not limited to the selection of paper quality and colour, cover design and page margins

Unit Range
This unit covers the knowledge and skills of using desktop publishing applications to support upstream desktop publishing activities. Most industries may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1   Learners should have access to a personal computer with appropriate application software and printer.

2   Learners should recognize the ethics and legal responsibility in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT207A, *Produce computer graphics by following instructions*, and GCIT310A, *Produce word processing documents to meet specific user requirements*, is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Plan and manage a project using computer applications
Unit Code	GCIT407A
Level	4
Credit	4

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of using project management tools to develop a plan to meet the goals of project management **Range** Developing the project plan by balancing and integrating competing demands to implement aspects of the project, including scope, time, cost, human resources, procurement, communications, quality and risk	1.1 Identify and select an appropriate tool(s) to support different stages in project management **Range** Project stages may include but are not limited to initiating and planning the project, executing the project, controlling the project and closing the project. 1.2 Establish project task list, task relationships, deadlines and constraints, project resources and cost according to the scope and nature of project **Range** Topics may include but are not limited to selecting a built-in project template; entering task details based on available information such as task name, task type, predecessor task and/or successor task, expected duration and budget; specifying tasks relationships such as finish-to-start, finish-to-finish, start-to-start and start-to-finish; project milestones, deliverables, obstacles, critical success factors; deadline and constrains of a task; assigning resources according to their availability; establishing resource cost and task cost 1.3 Use editing functions to insert, delete and move tasks **Range** Topics may include but are not limited to editing task details to cater for changing conditions; using indent and outdent functions to group subtasks; listing the details of the tasks; adding and/or deleting columns of custom information

		1.4	Use calendar functions to adjust time resources **Range** Topics may include but are not limited to using of multiple calendars to define working days and non-workings days, working hours for the project for different resources (base calendar, resources calendar) 1.5 Assign and modify resources and equipment associated with tasks **Range** Topics may include but not limited to availability of human resources, materials and equipment; working hours for individual, unit material price; costs such as salary standard rate, overtime rate, per use cost and type of cost accrual 1.6 Use tabular and/or graphic functions to view tasks, schedule and resources usage **Range** Topics may include but are not limited to using different tables, charts to view task list, Work Breakdown Chart, Gantt Chart, critical path and resources allocations
2	Apply the project plan as the baseline of the project **Range** Adjust, modify and update project plan by responding to changes in scopes, budget and finish date	2.1	Use the project management tools to identify and resolve conflicts by modifying resources provision **Range** Topics may include but are not limited to selecting, modifying and replacing under-allocation and over-allocation resources 2.2 Manage the project management data in appropriate format **Range** Topics may include but are not limited to saving the project data as the baseline project plan 2.3 Share and exchange the project management data in an appropriate format familiar to the target audience **Range** Topics may include but are not limited to task sheet, resources sheet, Gantt Chart, network diagrams, cost/schedule status reports and exporting data to different software
3	Use project management tools	3.1	Enter actual duration and cost of tasks and

to monitor and track project progress **Range** Monitor variances and reflect the true nature of project when comparing with the baseline		display updated statistics **Range** Topics may include but are not limited to current cost status, under-allocated resources and upcoming deadlines
	3.2	Use appropriate tools to compare and analyse the planned and actual costs **Range** Topics may include but are not limited to applying appropriate filter to display over-budget tasks, tasks in the critical path, tasks not confirming with the baseline and their constraints
	3.3	Review project plan by updating task and resources allocation responding to changes in scope, budget and finish date **Range** Topics may include but are not limited to comparing different project plan versions, recalculating the project schedule and cost
	3.4	Generate reports to assist project progress monitoring and project control **Range** Topics may include but are not limited to progress report, milestones, over-budget and to-do lists
4 Close the project by capturing actual metrics for future use	4.1	Generate reports for recording project metrics and analyzing project performance **Range** Topics may include but are not limited to generating project summary, tasks summary, critical tasks, budget summary and earned value

Unit Range
This unit covers the knowledge and skills to plan and manage a project using computer applications. People working in project oriented sectors may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a

minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3 All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

4 The assessment of this unit should focus on the ability to apply project management computer applications to manage a project. Learners are required to solve a scenario problem in project management by planning a project, tracking project progress and generating a report.

Special Notes
1 Learners should have access to a personal computer with a suitable project management software and printer.

2 Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3 Competence in GCIT101A, *Demonstrate an understanding of legal issues, health and safety when using IT equipment* is assumed

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Use web technology to support organisational functions
Unit Code	GCIT408A
Level	4
Credit	3

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of using web technology to support organisational functions	1.1 Identify application areas of web technology commonly used by different trades and industries **Range** Topics may include but are not limited to web services with or without client/server supports, email and webmail services, domain name service and FTP service 1.2 Identify the benefits of using web technology in different trades and industries **Range** Benefits may include but not limited to the use of static and dynamic webpages to enhance publicity; providing better customers services such as document repository and searching documents; using intranet to enhance communications with customers and within organisation
2 Identify and select appropriate web-hosting deployments from vendor(s) to support organisation functions	2.1 Identify key features and functions provided by vendors **Range** Topics may include but are not limited to platform specifications, service level agreement of data center, database support and scripting features, email capabilities, network security and management, content management support 2.2 Select appropriate web services to meet organisational functions **Range** Services may include but are not limited to FTP, database support, email support, hackers prevention, backup, hit counter, pre-installed

		scripts, search functions, e-commerce support, shopping cart, on-line product catalogue, chat room, discussion forum, guestbook, web survey, membership registration and login
3	Manage the web services to support organisation functions	3.1 Use appropriate tools to maintain and update the content of the web **Range** Topics may include but are not limited to the use of appropriate content management tools and website builder; publication of webpages by uploading files to an appropriate location ready for use 3.2 Identify and select appropriate add-ons to enhance features and functions of the web services **Range** Topics may include but are not limited to the selection of payment gateway, an appropriate solution provider for ePayment services; inclusions of web banner, pop-up and animation banners; eNewsletter to enhance publicity 3.3 Obtain and evaluate statistical data for various web services **Range** Topics may include but are not limited to liaison with web-hosting company to obtain data such as traffic report, hit-counters, distribution of hits, SPAM mail statistics, e-mail usage and sub-domain statistics

Unit Range
This unit covers the knowledge and skills of using web technology to support organisational functions. People working in sales and marketing, education, advertising, the leisure industry, printing and publishing may find this unit useful.

Assessment Guidelines
1   The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2   Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3   All assessment activities should be valid, reliable and practicable, with the focus on

outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes

1   Learners should have access to a personal computer with a suitable web authoring software, Internet connection and printer.

2   Learners should recognize the ethics and legal responsibility in using information.

3   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4   Competence in GCIT108A, *Navigate and acquire information within the World Wide Web using a browser* and GCIT302*, Demonstrate understanding of social implications and contemporary issues of IT* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Use e-commerce applications to support organisational functions
Unit Code	GCIT409A
Level	4
Credit	4

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of e-commerce	1.1 Identify components of e-commerce **Range** Components may include but are not limited to the software interface (eg browser), Internet Service Providers, portals and services providers 1.2 Identify elements of e-commerce **Range** Elements may include but are not limited to the information flow, cash flow and flow of products 1.3 Identify risks associated with using e-commerce **Range** Topics may include but are not limited to privacy, authentication, confidentiality and integrity 1.4 Identify measures, controls to prevent frauds in using e-commerce **Range** Topics may include but are not limited to network security: firewall, authentication, security protocol, multiple factors authentication, smart card, biometrics authentication, policy and functions of entry portal 1.5 Identify restrictions of using e-commerce **Range** Topics may include but are not limited to the restrictions of technology, the general public

			acceptance, government policy, legislation and legal issues of e-commerce and the fairness in using e-commerce
2	Demonstration an awareness of market trend in using e-commerce	2.1	Identify the market trend and local government policy in e-commerce **Range** Topics may include but are not limited to the availability of business entry portals, registry and search services, supports of legislation and public key infrastructure (PKI)
		2.2	Identify factors of a successful e-commerce application **Range** Topics may include but are not limited to selling price, reputation, after sales service and availability of services/products
3	Identify and select appropriate security measures in using e-commerce	3.1	Identify the parities involved in e-commerce transactions **Range** Topics may include but are not limited to different parties including customers, merchants, banks (issuing and clearing)
		3.2	Identify and select appropriate security measures between these parties **Range** Topics may include but are not limited to encryption and decryption, client and server; uses of digital certificate, public key and private key, encryption key, session key, and the size of keys; multiple factors authentication, client and server authentication
4	Configure and use browser in e-commerce	4.1	Identify and select appropriate security level settings of the browser to match the e-commerce activities **Range** Configurations may include but are not limited to security level selection, ActiveX controls, trusted websites and restricted websites, e-certificate installation and verification of server or other parties' e-certificate
		4.2	Login to appropriate e-commerce websites/portals to complete transactions
		4.3	Identify and select appropriate modes of e-commerce to complete the transactions

		Range Modes may include but are not limited to Business to Consumer, Business to Business and Customer to Customer	
		4.4	Follow good practices to prevent pitfalls when using e-commerce
			Range Topics may include but are not limited to the use of e-certificate and security protocol, change of password regularly, implementation of membership policy to increase security, balance of right and responsibility of the merchants, customers and role of memberships
5	Identify and avoid criminal activities in e-commerce	5.1	Identify types of illegal and criminal activities in e-commerce
			Range Activities may include but are not limited to the use of deceptive information and phishing web-sites, espionage, the use of pirate software/media, activities that violate copyright, patent and trademark
		5.2	Avoid illegal and criminal activities in using e-commerce
			Range Topics may include but are not limited to the cooperation with government, the use of organisational guidelines, the awareness of legal responsibility, awareness training for staff and the general publics

Unit Range
This unit covers knowledge and skills of using e-commerce applications to support organisational functions. Most industries may find this unit useful.

Assessment Guidelines
1 The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2 Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3 All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the

specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes

1   Learners should have access to a personal computer with Internet connection and appropriate software.

2   Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

3   Competence in GCIT108A, *Navigate and acquire information within the World Wide Web using a browser* and GCIT301, *Demonstrate knowledge and skills of maintaining information security when using the Internet* is assumed.

Generic (Foundation) Competencies

Unit of Competency (Information Technology)

Unit Title	Use Information and Communications Technology (ICT) to support organisational functions
Unit Code	GCIT410A
Level	4
Credit	4

Elements of Competency	Performance Criteria
1 Demonstrate an understanding of Information and Communications Technology (ICT)	1.1 Identify application areas of ICT used by different industries **Range** Topics may include but are not limited to remote video monitoring, video conference, location positioning for mobile users, short message services and multimedia message services 1.2 Identify different business and services sectors that can be benefited with the use of ICT **Range** Topics may include but are not limited to retails, property management, logistics management, construction site, intelligent home; multiparty conference, training and education, sales and marketing, executive decision making, company with offices at multiple sites; logistics fleet management and emergence rescue services
2 Identify and select ICT deployments to support organisational functions	2.1 Identify features of the designated ICT deployments **Range** In remote video monitoring, topics may include but are not limited to bandwidth, frame-per-second, synchronisation of audio and video, pan, tilt and zoom of camera, resolution of camera, lighting condition of video capture, instant recording and auto-alarm In video conference, advantages and disadvantages may include but are not limited to the collaboration of team members from different sites, enhancing effectiveness of a meeting, improving customer relationships, productivity enhancements, the support of formal meeting; lacking of real gestures and

	face-to-face contacts In other areas, topics may include but are not limited to the cost of SMS and MMS, one-way message systems and the accuracy of location estimation of mobile users 2.2 Identity issues associated with the designated ICT deployments **Range** Ethical topics may include but are not limited to privacy, legal issues, moral issues, trust versus monitoring and staff morale; Technical topics may include but are not limited to delay, jitter of frames, synchronisation of video and voice, the quality and clarity of video and voice, the limitation of bandwidth among different sites and restrictions in number of sites 2.3 Select appropriate ICT deployments to support organisational functions. **Range** Topics may include but are not limited to the cost-effectiveness of the ICT deployment, capital investment, return of investment, running cost, maintenance cost, saving in travelling time, deterrent of illegal activities and malpractices, better information security and the ease of management
3 Use the deployed system to enhance productivity	3.1 Select and configure software settings to match the ICT activities by following the manufacturers' instructions 3.2 Login to the appropriate websites/applications to perform the tasks 3.3 Operate the system to support organisational functions effectively 3.4 Monitor and evaluate the effectiveness of the ICT deployment/system **Range** Topics may include but are not limited to benefits and impacts; running cost and capital investment

Unit Range
This unit covers the knowledge and skills of using ICT applications to support organisational functions. Most industries may find this unit useful.

Assessment Guidelines

1 The competencies covered by this unit can be demonstrated by an individual working alone or as part of a team to the assessor/examiner in a combination of appropriate forms, such as written assignments, written tests, on-line tests, skill tests, hands-on demonstrations, observations in the workplace by verified/qualified assessors, oral presentations, project work, portfolios of workplace activities, case studies, simulations, role-plays and learning diaries/logs.

2 Where possible knowledge should be tested in practical and applied contexts with a minimum of written testing. Institutions, in-house trainers and/or assessors should provide industry-specific contexts for the assessment of the skills and knowledge.

3 All assessment activities should be valid, reliable and practicable, with the focus on outcomes to ensure that sufficient evidence of the performance criteria set in the specification is collected. The contexts of activities should be as close to work situations as possible and the performance criteria should be open to those concerned.

Special Notes
1 Learners should have access to a personal computer with suitable software and system with Internet/networking connection.

2 Learners should recognize the ethics and legal responsibility in using information.

3 Practical applications in vocational contexts should be emphasized in teaching and learning as far as possible in order to relate skills and techniques acquired to an actual working environment.

4 Competence in GCIT108A, *Navigate and acquire information within the World Wide Web using a browser* and GCIT302*, Demonstrate understanding of social implications and contemporary issues of IT* is assumed.