Course Information Handbook 2016

ICT50115 Diploma of Information Technology
Description of Qualification

This qualification provides the skills and knowledge for an individual to administer and manage information and communications technology (ICT) support in small-to-medium enterprises (SMEs) using a wide range of general ICT technologies.

Persons working at this level provide a broader rather than specialised ICT support function, applying a wide range of higher level technical skills in ICT areas such as networking, IT support, database development, programming and web development.

Entry Requirements

There are no entry or pre-requisite requirements for this qualification.

Duration of training

Course duration of this Diploma of Information Technology is up to 1 year.

Pathways into the qualification

Preferred pathways for candidates considering this qualification include:

• after achieving ICA40115 Certificate IV in Information Technology, or other relevant qualifications or units equivalent to the core of ICA40115

OR

• with demonstrated vocational experience in a range of work environments using a wide range of information technologies.

Competencies required to obtain Qualifications

To receive this Diploma of Information Technology, learners must complete twenty (20) units of competency as outlined in the training package (below). This qualification has four (4) core units and sixteen (16) electives.

Pathways from this qualification

This program is at Level 5 on the Australian Qualification Framework (AQF) and, hence, is a nationally recognised vocational qualification.

After achieving the ICT50115 Diploma of Information Technology, students may undertake the ICT60115 Advanced Diploma of Information Technology, or a range of other Advanced Diploma qualifications or seek credit towards a tertiary undergraduate program.

Credit Transfer (CT) / Recognition of Prior Learning (RPL)

If you have completed past studies in areas related to the Diploma of Information Technology, you may be eligible for a credit transfer. You will need to complete an application form and provide a JP certified copy of your past qualification(s).

Recognition of Prior Learning (RPL) is a form of assessment that involves evaluating the skills and knowledge acquired by a person (including formal, informal and non-formal learning) to determine credit outcomes. It exists for people who are confident they already have developed knowledge for some, or all of their units of competency, either through previous experience or study. To assess eligibility for RPL, applicants will need to apply for RPL. For further information about credit transfers or RPL contact headoffice@ccc.edu.au or phone 1300 907 050.
Client needs assessment

Client needs are established during an individual Pre-Training Assessment. This includes Reading & Writing tasks, a Numeracy assessment and an interview which assesses Learning & Oral Communication Skills and any cultural or ethnic considerations. Customisation of resources and assessment, or assistance is available, for participants with special needs relating to their chosen course.

Delivery Mode

This course is delivered via a structured workshop/classroom program and/or online. All students access the online Learning Management Systems (LMS), which provides resources, readings, slides, case studies and assessment tasks. The trainer/assessor presents information, facilitates interactive discussions, group work and/or reflective practice. Course assessments relate to ‘real work’ expectations and outcomes.

Course Structure

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Outline of Units

**BSBWH501 - Ensure a safe workplace**

Unit Descriptor:

This unit describes the performance outcomes, skills and knowledge required to establish, maintain and evaluate the organization’s work health and safety (WHS) policies, procedures and programs in the relevant work area according to WHS legislative requirements.

**Elements:**
1. Establish and maintain a WHS management system
2. Establish and maintain effective and complaint participation arrangements for managing WHS
3. Establish and maintain procedures for effectively identifying hazards, and assessing and controlling risks
4. Evaluate and maintain WHS management system.

**Pre requisites:** Nil

**BSBSUS501 - Develop workplace policy and procedures for sustainability**

Unit Descriptor:

This unit describes the performance outcomes, skills and knowledge required to develop and implement a workplace sustainability policy, including the modification of the policy to suit changed circumstances.

This unit requires the ability to access industry information, applicable legislative and occupational health and safety (OHS) guidelines.

**Elements:**
1. Develop workplace sustainability policy
2. Communicate workplace sustainability policy
3. Implement workplace sustainability policy
4. Review workplace sustainability policy implementation.
**Pre requisites:** Nil

**ICTICT509 - Gather data to identify business requirements**

**Unit Descriptor:**

This unit describes the performance outcomes, skills and knowledge required to identify, analyse and document business requirements. It applies to individuals working as systems analyst developers and project team leaders, and managers responsible for gathering data to identify business requirements.

**Elements:**
1. Identify key information sources
2. Gather data
3. Prepare data analysis for review.

**Pre requisites:** Nil

**ICTICT511 - Match IT needs with the strategic direction of the enterprise**

**Unit Descriptor:**

This unit describes the performance outcomes, skills and knowledge required to ensure information technology (IT) services meet current and future internal operational enterprise requirements. It applies to individuals whose responsibilities may include maintaining and supporting critical infrastructure for objectives in small-to-medium sized organisations.

**Elements:**
1. Evaluate current business strategy
2. Evaluate effects of change
3. Develop action plans.

**Pre requisites:** Nil

**ICTNWK516 - Determine best-fit topology for a local network**

**Unit Descriptor:**

This unit describes the performance outcomes, skills and knowledge required to determine the most appropriate way of networking computers to meet user needs and business requirements. It applies to individuals in senior networking roles who are required to plan the most appropriate topology for a proposed network.

**Elements:**
1. Determine user needs
2. Develop local area network specification

**Pre requisites:** Nil

**ICTNWK519 - Design an IT security framework**
Unit Descriptor:

This unit describes the skills and knowledge required to evaluate information and communications technology (ICT) security requirements for a new system and to plan for controls and contingencies. It applies to individuals working in senior roles in the networking area who are required to design security for new ICT systems.

Elements:
1. Research IT security requirements
2. Conduct risk analysis
3. Develop IT security policy and operational procedures.

Pre requisites: Nil

ICTPRG501 - Apply advanced object-oriented language skills

Unit Descriptor:

This unit describes the skills and knowledge required to undertake advanced programming tasks using an object-oriented programming language. It applies to individuals who are programmers producing complex object-oriented programming.

Elements:
1. Develop client-side application
2. Develop graphical user interface (GUI)
3. Build applications
4. Debug code
5. Test application

Pre requisites: Nil

ICTPRG505 - Build advanced user interface

Unit Descriptor:

This unit describes the skills and knowledge required to design, build and test an advanced user interface (UI), including interaction techniques, rich controls, improved client-side validation, customisation and personalisation, graphics and multimedia.

Elements:
1. Plan the UI design
2. Implement interaction techniques
3. Implement a customizable and personalised UI
4. Implement the graphics and multimedia.

Pre requisites: Nil

ICTPRG525 - Build java applets

Unit Descriptor:

This unit describes the skills and knowledge required to compile and run an applet that
executes in Java-enabled browsers, and interacts with users. It applies to individuals involved in software, web or games development and who are required to build applets, using Java that interacts with users via a browser.
**Elements:**
1. Create Java source file
2. Compile a source file
3. Run applet.

**Pre requisites:** Nil

**ICTPRG527 - Apply intermediate object-orientated language skills**

**Unit Descriptor:**

This unit describes the skills and knowledge required to undertake intermediate level programming tasks using an object-oriented programming language. It applies to programmers in a variety of fields who are required to produce programs in object-oriented languages.

**Elements:**
1. Build applications using the provided language utilities
2. Write programs that interact with a database
3. Write the graphical user interface
4. Debug the application
5. Test the application
6. Create and maintain documentation.

**Pre requisites:** Nil

**ICTICT501 - Research and review hardware technology options for organisations**

**Unit Descriptor:**

This unit describes the performance outcomes skills and knowledge to apply research skills when reviewing hardware solutions, as part of an analysis of emerging technology. It applies to individuals in senior roles who administer and manage information and communications technology (ICT) support in small-to-medium enterprises (SMEs) using a wide range of general ICT technologies.

**Elements:**
1. Determine organisational needs
2. Research vendors, suppliers and IT industry specialists
3. Evaluate and report on hardware technology options.

**Pre requisites:** Nil

**ICTSAS517 - Use network tools**

**Unit Descriptor:**

This unit describes the performance outcomes, skills and knowledge required to use tools to assist in managing a network effectively. It applies to individuals who apply technical and specialised knowledge to monitor security and resolve issues for the network.

**Elements:**
1. Use command line tools
2. Use hardware tools
3. Use software tools.
Pre requisites: Nil

**ICTSAS518 - Install and upgrade operating systems**

**Unit Descriptor:**

This unit describes the skills and knowledge required to maintain, install new and upgrade existing operating systems (OS) in a medium to large organisation. It applies to individuals who apply technical and specialised knowledge to undertake complex support operations.

**Elements:**
1. Determine organisational help desk procedures
2. Install or upgrade a desktop OS
3. Manage and troubleshoot resource access
4. Configure and troubleshoot hardware device and drivers
5. Configure and troubleshoot the desktop and user environments.

Pre requisites: Nil

**ICTWEB411 - Produce basic client-side script for dynamic web pages**

**Unit Descriptor:**

This unit describes the skills and knowledge required to develop interactive and engaging websites, using a range of features from various, appropriate languages.

It applies to individuals working in web development environments who are required to produce client-side scripts as a common means of creating interactive websites. These scripts offer an effective simple means of enabling websites to provide greater interaction with clients.

**Elements:**
1. Analyse the requirements for web documents
2. Design and produce web documents
3. Test the scripts and debug.

Pre requisites: Nil

**ICTWEB501 - Build a dynamic website**

**Unit Descriptor:**

This unit describes the skills and knowledge required to analyse and design websites to meet technical requirements.

It applies to individuals working as web developers who are responsible for the analysis, design, implementation, and testing of websites.

**Elements:**
1. Define and analyse the technical requirements
2. Produce the software design specifications
3. Develop the website to the specified design
4. Test the web application.
Pre requisites: Nil

ICTWEB502 - Create dynamic web pages

Unit Descriptor:

This unit describes the skills and knowledge required to produce both server and client-side content.

It applies to individuals working as web developers who are responsible for creating dynamic pages to provide interaction between the user and the website. They use highly developed technical and analytical skills when developing the user-website interface.

Elements:
1. Identify the client and server-side dynamic content
2. Create the dynamic content
3. Test the dynamic pages.

Pre requisites: Nil

ICTWEB506 - Develop complex cascading style sheets

Unit Descriptor:

This unit describes the skills and knowledge required to develop complex cascading style sheets (CSS) that are attached to a markup language document.

It applies to individuals working as web designers and developers who are involved in the layout and appearance of web pages, and have a highly developed understanding of design principles, and software languages, and can apply protocols and standards proficiently.

Elements:
1. Determine the requirements and develop CSS
2. Use advanced CSS techniques to create web pages
3. Ensure web pages and CSS are validated and tested in all major browsers.

Pre requisites: Nil

BSBPMG522- Undertake project work

Unit Descriptor:

This unit describes the skills and knowledge required to undertake a straightforward project or a section of a larger project. It covers developing a project plan, administering and monitoring the project, finalising the project and reviewing the project to identify lessons learned for application to future projects.

This unit applies to individuals who play a significant role in ensuring a project meets timelines, quality standards, budgetary limits and other requirements set for the project.
Elements:
1. Define project
2. Develop project plan
3. Administer and monitor project
4. Finalise project
5. Review project.

Pre requisites: Nil

**BSBWOR501 - Manage personal work priorities and professional development**

Unit Descriptor:
This unit describes the capabilities required to create systems and processes to organise information and prioritise tasks.

Elements:
1. Establish personal work goals
2. Set and meet own work priorities
3. Develop and maintain professional competence

Pre requisites: Nil

**BSBWOR502 - Lead and manage team effectiveness**

Unit Descriptor:
This unit describes the skills and knowledge required to lead teams in the workplace and to actively engage with the management of the organisation. It applies to individuals working at a managerial level who facilitate work teams and build a positive culture within their work teams. At this level, work will normally be carried out using complex and diverse methods and procedures requiring the exercise of considerable discretion and judgement, using a range of problem solving and decision making strategies.

Elements:
1. Establish team performance plan
2. Develop and facilitate team cohesion
3. Facilitate teamwork
4. Liaise with stakeholders.

Pre requisites: Nil

Captain Cook College trusts that you will enjoy your learning experience with us and we wish you all the very best in successfully completing your qualification.

For further information call 1300 907 050 or email applications@ccc.edu.au.