ACBI

ICT40120

Certificate IV in
Information Technology

About this course

This Certificate IV course will develop your foundational skills in using introductory programming techniques, managing cyber security risks, resolving client IT problems and more. As a graduate, you'll be equipped with the skills and knowledge you need to land an in-demand job as a Programmer, IT Business Analyst orIT Support Officer.

What will I learn?

- Learn how to provide remote help desk support and support clients to resolve IT problems
- Develop your introductory programming skills, including in using object-oriented language
- Discover how to create and use relational databases
- Build your skills in key aspects of website development such as markup language documents and responsive website layouts
- Develop your foundational networking skills
- Learn how to test software and troubleshoot operating system software
- Build your understanding of cyber security risk management

What are the entry requirements

International students:

- Have completed Australian Year 12 or equivalent
- IELTS 6.0 English language equivalence if a non-native English speaker
- Be at least 18 years of age
- Have technological literacy (ability to use and access a computer with word processing applications)

Career Opportunities

- Computer Technician
- IT Support Officer
- Programmer
- IT Business Analyst
- Service Desk Analyst

Course Overview

Qualification
Certificate IV

CRICOS code
108187J

Study mode
Blended learning

Duration
52 Weeks

Units
20 Units of Competency

Course Units

Unit code	Unit name	What you'll learn
ICTSAS442	Provide first-level remote help desk support	Be equipped to tackle and resolve first-level user support issues. Learn how to confirm the issues experienced by users and their expected outcomes, then guide the client through the resolution process. Also build your skills in eliminating factors that created a user support issue, confirming resolution of the user issue and obtaining client satisfaction.
ICTDBS416	Create basic relational databases	Build valuable skills in designing, developing and testing relational databases. That is, databasesthat store, organise and manage data in structured, table-based formats. In this unit, you'llexplore how you can design an entity-relationship (ER) diagram, define primary and foreign keys, develop a data dictionary, user database servers, fix database problems and more.
ICTPRG431	Apply query language in relational databases	Develop the skills you need to be able to retrieve and manipulate information stored in databases.Discover how you can build queries, aggregate records, use expressions, perform operations and execute sub-queries. Also develop your ability to create and manipulate tables.
ICTSAS445	Configure and troubleshoot operating system software	In this unit, you'll build your understanding of configuring a range of operating systems, including Linus and more. Learn how to determine licensing, hardware and security requirements. Then install Operating Systems, manage virtual memory, identify command line options and trouble operating system problems.
ICTPRG302	Apply introductory programming techniques	Jump into the exciting world of programming. Learn how to use variables, data types, operators, expressions, language syntax and program library functions. By the end of this unit, you'll be able to use data structures and design algorithms.
ICTPRG433	Test software developments	Discover how you can review software development requirements and prepare testing plans. Build your understanding of testing tools, frameworks and terms. Also grow your ability to perform test executions and analyse test results.
ICTSAS432	Identify and resolve client ICT problems	Be equipped to tackle common client IT problems. In this unit, you'll build your ability to identify, record and prioritise client IT problems. You'll also grow your skills in investigating IT problems, completing IT maintenance and sharing IT reports with clients.
ICTPRG430	Apply introductory object-oriented language skills	Dive into the world of object-oriented languages. Object-oriented programming (OOP) languages go beyond functions and logic to organise their code around objects; that is, bundles of data and related behaviors. They include popular programing languages such as Python, Ruby, Javaand C++. In this unit, you'll learn how to develop, test and debug code created using OOP languages.
ICTICT426	Identify and evaluate emerging technologies and practices	Discover emerging technologies and practices that IT professionals are using. Learn how to analysethese technologies and practices and evaluate their potential impacts. Also develop your skills in proposing changes to organisational technologies and practices in response to IT trends.

Course Units

Unit code	Unit name	What you'll learn
ICTNWK424	Install and operate small enterprise branch networks	Jump into the world of branch networks. That is, secure networks that connect infrastructure such as branch offices, internal data centers and employee devices. They include technologies such as Wide Area Networks (WANs), Virtual Private Networks (VPNs) and Local Area Networks (LANs). In this unit, you'll develop your skills in implementing basic security, configuring simple networks and undertaking route and switch operations.
BSBCRT411	Apply critical thinking to work practices	Refine your ability to use important critical thinking skills that can aid your IT career, including your ability to solve problems. Learn how to apply the key critical thinking of process of gathering, analysing, synthesizing and evaluating information. Also refine your ability to present ideas for solutions and justify your decision-making.
ICTICT429	Determine and confirm client business requirements	An important part of working with IT clients is being able to clarify their requirements and expectations, and that's what you'll explore in this unit. Build your skills in navigating client business system requirements. Learn how to produce a statement of business expectations. Then analysephysical requirements and identify new system requirements.
ICTWEB432	Design website layouts	Learn how to design a website that matches client requirements. Learn how to interpret a client brief and determine hardware and software requirements. Also build your skills in understanding user experience requirements, then designing the hierarchy, structure and content of website pages accordingly.
ICTWEB444	Create responsive website layouts	Discover how to build website pages that are responsive to user devices, screen sizes, window sizes and more. Learn how to position website page elements according to design requirements, then test website pages in multiple browsers and devices.
ICTWEB431	Create and style simple markup language documents	Dive into the realm of markup language documents. Build your understanding of HTML, XML and CSS documents and how they can be used when creating website pages. Learn how to style websites using Cascading Style Sheets (CSS), including using manual and automated approaches for creating and testing CSS.
ICTPRG437	Build a user interface	Explore how you can design build and test User Interfaces (UIs). That is, interfaces like screens and voice applications that enable humans to interact with computers. In this unit, you'll build your understanding of a range of interfaces including command-line interfaces (CLIs), graphical user interfaces (GUIs), web user interfaces (WUIs) andnatural user interfaces (NUIs). You'll learn how to build prototypes, define UI events and iterate UI design using testing.
ICTICT451	Comply with IP, ethics and privacy policies in ICT environment	Build your ability to understand and follow a business's IT policies. Develop your knowledge of Intellectual Property (IP), ethics and privacy considerations. Also grow your ability to document risk assessments and develop approaches for protecting an organisation's IP.

Course Units

Unit code	Unit name	What you'll learn
ICTICT443	Work collaboratively in the ICT industry	Build important skills that you need to effectively work within an IT team. In this unit, you'll explore how to work in virtual environments as part of an IT support team, including how you can best communicate, share knowledge and follow cyber safety protocols.
BSBXCS404	Contribute to cyber security risk management	Build your understanding of important cyber security risks impacting businesses. In this unit, you'll learn how to interpret and implement a range of cyber risk management strategies that follow industry best practices.
ICTCYS404	Run vulnerability assessments for an organisation	Discover how to identify potential cyber security threats to an organisation. Build your skills in running vulnerability assessments and basic penetration tests. Learn how to select scanning tools, establish a testing regime, document vulnerabilities and develop approaches for addressing vulnerabilities.