

Information Technology  
Lachlan IT Online

Diploma 19016  
IT (Networking)

Unit and  
Assessment Guide  
2010

# 19016 Diploma in IT (Networking)

## Unit and Assessment Guide 2010

### Introduction

The following information is intended for networking students enrolled in 19016 Diploma in IT - Networking, through Lachlan IT Online – Parkes Campus of TAFE.

Many of our course resources internet based. Our website <http://www.lachlanonline.edu.au> contains these resources. Resources related to our courses can be found through the courses link and then selecting the course link you are enrolled in. These resources include documents such as this, podcasts, and the toolbox learning resources.

This document is designed as a guide to assist you to locate the resources required to complete any subject within the course. Through our website, there is an “Introduction to the Toolbox” podcast as well as other casts introducing a number of our courses. If you feel there is a need for additional resources, please do not hesitate to contact us.

The content of the 19016 Diploma in IT - Networking is made up of sections called ‘Competency Units’ or simply ‘Units’. Each unit has a title that reflects the content that it covers. Each unit also has a series of assessment tasks that allow the student to demonstrate that they have mastered the skills covered in the unit.

There are five main groups of units in the 19016 Diploma in IT - Networking. They are the:

- Foundation level units (Cert II and III level units)
- Prerequisite Core units (Cert III, IV and Diploma level units)
- Specialist Core units (Diploma level units)
- Specialist Elective units
- General Elective units

Competency units can be achieved in a number of ways. If you already possess the skill required to meet a competency, we can use Recognition of Prior Learning (RPL) to credit this competency to your course – allowing you to progress through the course faster. For competencies which we provide training for will be supported using a variety of resources, which are outlined below.

Many of the unit numbers in this course have changed from 2009 from version A to version B. However, to avoid confusion between this document and the website, we have retained original version name in this document. Your results statements may show different versions to those listed below. For example you may have worked through an internet resource for unit “ICAU2005A”, but your transcript of results uses the unit number “ICAU2005B”.

### Foundation Level Units

When first enrolling in this course, students should focus their efforts on a group of units called foundation level units. These provide a series of skills and experiences that provide a foundation for more advanced units which follow. Many students will have completed these in other courses. For students with are currently skilled in these areas, talk to your teacher about having your skills assessed.

The foundation units are listed below in Fig 1.1:

Module/Unit Code	Module/Unit Name	Nom Hrs
BSBCMN106A	Follow workplace safety procedures	10
ICAD2012A	Design organisational documents using computing packages	35
ICAU1128A	Operate a personal computer	15
ICAU2005A	Operate computer hardware	25
ICAU2006A	Operate computing packages	40
ICAU2013A	Integrate commercial computing packages	25
ICAU2231A	Use computer operating system	20
ICAW2001A	Work effectively in an IT environment	25
ICAW2002A	Communicate in the workplace	25

Fig 1.1 Foundation level units in course 19007

Students should complete all of the foundation level units prior to attempting more advanced units. Study materials and assessment tasks for these units are contained in the 19001 Certificate II Toolbox. The link to these materials can be found at <http://www.lachlanitonline.edu.au/Toolboxes/CertII>.

### Prerequisite Core Units

The next group units to be attempted range from Certificate III level to Diploma Level. They are designed to cover all the key Networking skills required for the specialist core units.

These units are listed below in Fig 1.2:

Module/Unit Code	Module/Unit Name	Nom Hrs
ICAA4233A	Determine and apply appropriate development methodologies	20
ICAA5140A	Design a server	30
ICAB5160A	Build and configure a server	50
ICAD4217A	Create technical documentation	20
ICAI3020A	Install and optimise operating system software	20
ICAI3101A	Install and manage network protocols	30
ICAI4029A	Install network hardware to a network	40
ICAI4097A	Install and configure a network	50
ICAS3024A	Provide basic system administration	20
ICAS3032A	Provide network systems administration	20
ICAS3120A	Configure and administer a network operating system	40

Fig 1.2 Prerequisite core units in course 19016

It is important that Diploma students be very confident with the skills contained within these competencies. Specialist Core units (listed in the next section), will assume that all students are able to practically install and configure the networking components dealt with in these units. It may mean that a student needs to repeat a task multiple times in order that they gain confidence in the skill.

Each of these units are combined into a series of practical projects which can be conducted using our virtual Online Lab system which can be found at <http://portal.lachlanitonline.edu.au> . There is also a series of introductory podcasts on how to use the Virtual Online Lab which can be found at <http://www.lachlanitonline.edu.au/Documents/Podcasts/index.html> .

## Specialist Core Units

These units represent high level IT skills in the 19016 Diploma in IT (Networking). They cover areas of project management, network design, network installation, management and security.

These units are listed below in Fig 1.3:

Module/Unit Code	Module/Unit Name	Nom Hrs
BSBPM505A	Manage project quality	63
ICAA5045A	Produce network architecture design	30
ICAA5056A	Prepare disaster recovery and contingency plans	60
ICAA5158A	Translate business needs into technical requirements	40
ICAI5098A	Install and manage complex networks	90
ICAI5100A	Build an internet infrastructure	80
ICAS5202A	Ensure privacy for users	30
PSPPM502B	Manage complex projects	62

*Fig 1.3 Specialist Core units in course 19016*

These modules provide the bulk of the opportunities for students to experience and practice high level networking skills. They are also framed in a series of projects which can be provided by through internet access or through attending the college for workshops. Routing and switching equipment is based on Cisco operating systems. Server operating systems will be a mixture of Unix and Microsoft Operating systems.

## Specialist Elective Units

The specialist elective units that would normally be offered at Lachlan IT Online are listed below in Fig 1.4. Most students would normally complete this program of modules.

Module/Unit Code	Module/Unit Name	Nom Hrs
ICAS4124A	Monitor and administer network security	20
ICAS5123A	Manage network security	50
ICAB5237A	Build a high performance security perimeter	30
ICAB5238A	Build a highly secure firewall	30
ICAI5176A	Install and configure router	20
ICAI5196A	Implement secure encryption technologies	20

*Fig 1.4 Specialist Elective units in course 19016*

For a full listing of other possible electives, please ask your teacher. These should be chosen in consultation with your teacher who will be aware of the study difficulty, resource requirements and time requirements for each of the available electives.

## General Elective Units

Students are required to choose **one** general IT elective from the list below. These units, which may use a variety of resources, are listed in Fig 1.5:

Module/Unit Code	Module/Unit Name	Nom Hrs
ICAA5141A	Design dynamic websites to meet technical requirements	30
ICAA5241A	Design an enterprise wireless local area network	40
ICAI5152A	Implement risk management processes	30
ICAS5199A	Manage business websites and servers.	30
ICPPP411A	Undertake a complex design brief	60

*Fig 1.5 General Elective units in course 19016*

## Summary

Graduates of 19016 Diploma in IT must demonstrate a high level of proficiency in their IT skills. The nature of such a high level course means that the paths different students follow to complete their studies may vary greatly depending upon their individual circumstances. These paths are negotiated with and supported by, your IT teacher who will accompany you your journey. The staff at Lachlan IT Online looks forward to working with you on this journey.