

# ICT40118 Certificate IV in Information Technology (Networking)

The recommended Certificate IV study plan has the following key features:

- > The recommended study plan will require 12 months of study to complete.
- > There is a focuses on the latest network technologies including Microsoft, Linux, Cisco and ITIL
- > There is a focus on Industry skills and certification. By the end of their studies if successful students should obtain various Microsoft certifications (MTA, MOS, etc) as well as the Certificate IV in Information Technology.

### **Subsidised Training**

- You may be eligible for government subsidised training based on your employment and training level.
- > For full details, including visa eligibility, please see the Skills SA website
- > While this course may attract government subsidies, there may also be upfront fees, depending on any required underpinning knowledge and skills.
- > ALL STUDENTS, IRRESPECTIVE OF PREVIOUS STUDIES, WILL BE REQUIRE TO DO THE CORE SKILLS PROFILE FOR ADULTS (CSPA) BEFORE THEY ARE ELIGIBLE FOR GOVERNMENT SUBSIDY.

### **IT Studies Subjects**

This qualification is from the National Training Package ICT18 that is developed by the Commonwealth Government. TAFE SA IT Studies clusters related competencies in the Training Package into subjects. The information below refers to the TAFE SA IT Studies subjects and outlines the competencies that makes up those subjects. Delivery and assessment for the subjects will be done holistically so you will be awarded the same result for all competencies taught in that subject. Your final official results will refer to the competencies listed below.

### **Course Admission Requirements**

Satisfactory demonstration of reading, writing and numeracy skills by undertaking the Core Skills Profile for Adults (CSPA)





### **Assumed Skills and Knowledge**

This is not an entry level qualification. There are assumed skills and knowledge that are required to commence at this Certificate IV level. These could have been gained in several ways:

- Completed the Certificate III in Information, Digital Media and Technology (ICT30118); or
- Other study equivalent to it; or
- Have work experience and knowledge equivalent to it.

### **Incidentals**

This course also has an incidental cost of \$400.00 for 1 TB SSD portable hard drive, webcam and headset with microphone

### **Hardware & Software**

All software required to complete this course will be available for students at no additional cost.

It is important to note that for students studying this course online (externally) it will be assumed that you have the hardware required to run the required resources. It is recommended that you have the following as a minimum;

- Intel i5 CPU (or equivalent AMD)
- 16GB of RAM
- Internet Access

### Internet

This qualification requires students to use virtual machines for learning activities and assessments. Students will be required to obtain these from either their local campus or from the Internet. Virtual machine file sizes can vary but are generally above 20GB in size. Downloading these virtual machines from the Internet may vary depending on your Internet connection speed.

### **New Training Package Transition**

In July 2020 a new version (6.1) of the ICT training package was released. ASQA has approved an extended transition period for the ICT Release 5.0 superseded training products (ICT40118). The extended training, assessment and certification issuance period for this qualification ends on 31st December 2021.

If you expect to complete studying this qualification before the 31st December 2021 then you will not be impacted by this change. Students studying beyond this date will be required to transition into the new ICT40120 Certificate IV in Information Technology. IT Studies have developed a transition plan to assist you in planning your studies and in discussion with you will developed a study plan that will assist you in transitioning into the new qualification without being disadvantaged.

# Program Information 2021 ta



## **Required Competencies**

### **Certificate IV in Information Technology (Networking)**

National Code: ICT40118 TAFE SA Code: CP00262

This table shows the competencies that you must have on your academic record to achieve this qualification and the IT subjects you would complete.

IT Studies Subject	National Code	Unit Name	Unit Type	Assumed Knowledge and Skills
4CIRS7	ICTNWK404	Install, operate and troubleshoot a small enterprise branch network	LE	
	ICTNWK404	Install hardware to a network	LE	
4WOSF	ICTNWK408	Configure a desktop environment	LE	
4WOSF*	ICTIVWK408	Operate application software packages	E	
4PICTS**	ICTICT203	Participate in ICT services	E	
3PRB	ICTPRG301	Apply introductory programming techniques	E	
4ICW	ICTNWK401	Install and manage a server	LE	
4BSWN**	ICTNWK401	Build a small wireless local area network	LE	4CIRS7
SIUOS	ICTSAS518	Install and upgrade operating systems	F	4WOSF
40365**	ICTSAS518	Support users and troubleshoot desktop applications	LE	4003F
4USUS 4IFFT	ICTSAS421		C	
	ICTICT426	Identify and evaluate emerging technologies and practices Configure and maintain databases	_	416147
4CMDB			LE	4ICW
4AWS	ICTNWK403	Manage network and data integrity	LE	4ICW
	ICTNWK421	Install, configure and test network security	LE	4ICW
4CNS	ICTNWK409	Create scripts for networking	LE	3PRB
4SCCM	ICTNWK411	Deploy software to networked computers	LE	4ICW
4ACSR*	ICTICT424*	Address cyber security requirements	С	
4DCR*	ICTICT401*	Determine and confirm client business requirements	С	
4CEP*	ICTICT418*	Contribute to copyright, ethics and privacy in an ICT environment	С	
4WESAD*	ICTICT425*	Implement WHS, environmental sustainability and anti- discrimination practices in an ICT workplace	С	

Indicates units will be replaced when transitioning from ICT40118 to ICT40120

Indicates units that can be used as additional electives when transitioning from ICT40118 to ICT40120. Please note that due to the rules of the ICT20 Training package these units should be avoided if you are studying on a part -time basis.

**Subject Descriptions** 



### Subject Description Core & Common Elective 4CIRS7 This subject prepares students for jobs as network technicians and helps them develop additional skills required for computer technicians and help desk technicians. It provides a basic overview of routing and switching, IP addressing and security. It also familiarises students with the OSI layer model as well as the TCP/IP protocol stack. Students learn about the soft skills required for help desk and customer service positions and the final chapter helps them prepare for the CCENT certification exam. Network monitoring and basic troubleshooting skills are taught in context. 4WOSE This unit describes the skills and knowledge required to install, configure and support a desktop or workstation operating system such as Microsoft Windows 10 and 8.1 in a networked environment. It applies to individuals with competent technical skills employed in information and communications 4MOS\*\* In this subject, students will learn to be effective users of Microsoft Word, Excel and PowerPoint, acquiring skills and understanding of functions and features of these 3 office application. Students will learn to be effective users of Microsoft Word, Excel and PowerPoint, mastering tasks such as formatting, embedding and many other functions required in the day to day use of office applications. This subject will give the student the knowledge and skills to attain the MOS (Microsoft Office Specialist) certification. 4PICTS\*\* This unit describes the skills and knowledge required to apply the principles of service management when working in an information and communications technology (ICT) service desk environment. It applies to individuals who work in ICT service roles and are responsible for providing ICT service 3PRB This subject introduces the programming constructs of sequence, selection and iteration, array handling and file processing using Python. 4ICW This subject describes the skills and knowledge required to determine client business system requirements and verify the accuracy of the information gathered. It provides in-depth training on implementing, configuring, managing and troubleshooting Active Directory Domain Services (AD DS) in Windows Server 2016. It covers core AD DS concepts and functionality as well as common network services such as DNS & DHCP. Sharing and controlling resources, Windows update strategies as well as introducing PowerShell, performing backup and restore and monitoring and troubleshooting Active Directory related issues. It also covers fault tolerant storage technologies and Network Storage. After completing these subject students will be able to configure a server client LAN with AD DS in their Windows Server 2016 environments. 4BSWN\*\* This subject teaches students the skills and knowledge required to build and arrange connectivity to a single zone wireless local area network (WLAN) It applies to individuals with competent information and communications technology (ICT) skills using one wireless access point or wireless router in a small-to-medium enterprise 5IUOS In this subject students will learn to be effective users of Linux systems, acquiring skills and understanding of command line functions, file systems, users and groups, bash shell, process management, text editors, network applications, searching and organizing data, and graphical applications. Students learn to be effective administrators of Linux systems, mastering tasks such as hardware and device configuration, file system management, user administration, network configurations, kernel services, attaching new Linux systems to a corporate network, configuring the new systems for end-users, and troubleshooting. 4IEET This subject involves the student using skills and knowledge learnt to identify emerging technologies and practices in the ICT sector and assess them of adoption and implementation into their own organisations. They will determine its impact on organisation practices 4AWS This subject provides students with the knowledge and skills to configure and troubleshoot Windows Server 2016 Network Infrastructures. It will cover networking technologies most commonly used with Windows Server 2016 such Network Policy server and Network Access Protection and configuring

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	secure network access with technologies such as VPN, secure web and firewalls. It also covers routing and remote access as well as other relevant technologies.		
4CMDB	This unit describes the skills and knowledge required to install a Microsoft SQL Server and MySQL Server database, manage data, data access and data security, and improve database performance. It applies to individuals responsible for the maintenance and coordination of database operations. They usually work in an organisation, providing daily services as database administrators, database developers, database coordinators, or application developers.		
4CNS	This unit describes the skills and knowledge required to undertake scripted programming tasks for networking related activities.  It applies to individuals with competent technical skills employed in network or systems administration roles.		
40365**	This subject describes the skills and knowledge required to sustain users who run operating systems (OS) in a corporate or home environment. It applies to individuals who provide frontline support to users and apply technical and specialized knowledge to fault finding and problem solving. This subject will focus on supporting MS Office applications, including 2016 and O365.  You will also be required to select cloud storage solutions based on the analysis of organisational requirements. This will in include the development of implementation strategies to ensure that the organisation is prepared for the implementation of the selected cloud storage solutions.		
4SCCM	This unit describes the skills and knowledge required to install, configure, maintain and support server-side applications as well as client applications on network workstations, in both Windows based and Linux based networks. It will also cover skills and knowledge required to plan, manage and support the installation of new or upgraded software to networked computers according to vendor and organisation specifications  It applies to individuals working as network administrators and network support staff who implement the installation and configuration of client-server based software.		
4DCR*	This subject requires the student to gather information using verbal, written and other techniques and then to turn them into technical requirements for ICT projects. Student will use the skill and knowledge learnt to gather information and verify its accuracy.		
4CEP*	This subject involves maintaining professional and ethical conduct as well as to ensure that personal information of stakeholders is handled in a confidential and professional manner when dealing with stakeholders in an information technology (IT) environment.		
4ACSR*	This subject requires the student to determine the cyber security requirements of an organisation. Student will use a range of resources and tools to identify and protect the valuable assets of the organisation. Students will participate in the identification and control cyber security threats or risks.		
4WESAD*	This subject requires students to participate in workplace occupational health and safety (WHS), environmental sustainability and anti-discrimination consultative processes. Consultative arrangements, also referred to as participative arrangements, give the students insights in WHS, environmental sustainability and equal opportunity matters, and looks at the opportunity for stakeholders to participate in decisions that may impact on the WHS, environmental sustainability at EO of the workplace.		

\*Indicates units will be replaced when transitioning from ICT40118 to ICT40120

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### **TAFE SA Study Plan for Full-Time Students 12 Month** Certificate IV in Information Technology (Networking) N4AS

The following table shows the recommended study plan for the ICT40118 Certificate IV of Information Technology (Networking). Each stage is one semester (or 6 months) in length for Full-Time students\*.

### These are eligible for Subsidised Training

Please Note: This program structure is subject to change.

Stage 1 (Common)				
4CIRS7 (4)				
Term 1	Term 2			
4WOSF (4)	4ICW (4)			
4MOS** (2)	4BSWN** (2)			
4PICTS** (2)	5IUOS (4)			
3PRB (2)	4IEET (2)			
Practical (4)	Practical (4)			
18	18			

Stage 2 (Network)				
4CMDB (2)				
Term 1	Term 2			
4AWS (4)	4SCCM (4)			
4CNS (4)	4DCR* (2)			
40365** (2)	4ACSR* (4)			
	4WESAD* (2)			
	4CEP* (2)			
Practical (6)	Practical (4)			
18	18			

### Legend:

- The length of time for Part-Time students will depend on the number of subjects studied in each semester.
- The number in brackets after the subject is the indicative number of contact hours per week that you expect to study at a TAFE SA campus for that subject.

Practical additional sessions to complete subject activities, assignments and tests

NOTE: The study plan is for a full-time student with class-attendance. This is usually between 16-18 hours a week of attendance. Your local campus may offer the subject in a variety of formats including online, self-paced etc.

Click here to apply for this qualification

**Commented [GL1]:** Change to specialisation. Codes for SPS are: NET=IN4AS WEB=IW4AS PRG=IP4AS GEN=IG4AS DXC=ID4AS MTP=MS4AS

Commented [GL2]: Modify this table for specialisation

Commented [GL3]: Link to new website link on International page specifying Certificate IV Program in Information Technology ("Specilisation") <- Not yet available

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CRICOS Provider Code: 00092B - RTO Code: 41026 CRICOS Code:

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