

ICT40120 Certificate IV in Information Technology (Systems Administration Support)

The Certificate IV in Information Technology, specialising in Systems Administration Support reflects the role of individuals who are job ready and competent in a wide range of information and communications technology (ICT) roles and apply a broad range of skills in varied work contexts, using problem solving skills and effective communication with others.

The skills required for these roles may include, but are not restricted to:

- > Implementing maintenance procedures
- > Support to help troubleshoot system applications
- > Resolve ICT problems
- > Project support
- Supporting information systems and software including Microsoft windows desktop operating systems, Microsoft windows server operating systems
- > Data analytics (power bi and excel)

Employment Opportunities

- > IT Technician
- > Client Support Officer (ICT)
- > Help Desk Assistant (ICT)
- > Network Operations Technician
- > Software Support Technician
- > Technical Officer (ICT)
- > System Administrator (ICT)
- > Help Desk Team Leader (ICT)

The recommended study plan will require 12 months of study to complete this qualification.

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 REQUIRED TO DO THE CORE SKILLS PROFILE FOR ADULTS (CSPA) BEFORE THEY ARE ELIGIBLE FOR GOVERNMENT SUBSIDY.

International Students

International students should refer to the TAFE SA International Students website for fee information.



Course Admission Requirements

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

IT Studies Subjects

This qualification is from the National Training Package <u>ICT</u> 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.

Assumed Skills and Knowledge

There are no formal entry requirements for this course however, participants are best equipped to achieve the course outcomes if they have completed:

- > Certificate III in Information Technology; or
- > Other study equivalent to it; or
- > Have work experience and knowledge equivalent to it.

Incidentals

This course also has an incidental cost of \$300.00 for 1TB 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
- > 1Tb SSD
- Internet Access

Note: Apple MAC notebooks are not compatible with virtualisation software.

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.



Required Competencies

Certificate IV in Information Technology (Systems Administration Support)

National Code: ICT40120 TAFE SA Code: TP01249

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

CORE AND ELECTIVE UNITS (listed in delivery sequence)

Unit Code	Unit Title	Core/Specialist Elective/Elective	Assumed knowledge & skills	IT Studies subject code
ICTNWK424	Install and operate small enterprise branch networks	Elective	None	NWK4C3CIN
ICTTEN434	Install, configure and test internet protocol network	Elective	None	NWK4C3CIN
ICTICT443	Work collaboratively in the ICT industry	Core	None	ICT443
BSBCRT404	Apply advanced critical thinking to work processes	Core	None	CRT404
ICTSAS443	Support operating system users and troubleshoot applications	Specialist Elective	None	SAS443WOS
ICTSAS432	Identify and resolve client ICT problems	Core	None	SAS432
ICTCLD401	Configure cloud services	Elective	None	CLD401ACF
ICTICT426	Identify and evaluate emerging technologies and practices	Core	None	ICT426
ICTPRG302	Apply introductory programming techniques	Core	None	PRG302PYB
ICTNWK422	Install and manage servers	Elective	NWK4C3CIN	NWK422ICW
ICTICT451	Comply with IP, ethics and privacy policies in ICT environments	Core	None	ICT451
BSBXCS404	Contribute to cyber security risk management	Core	None	XCS404
BSBXBD403	Analyse big data	Elective	PRG302PYB	XBD403PBI
ICTSAS526	Review and update disaster recovery and contingency plans	Elective	None	SAS526
ICTICT441	Provide one-to-one instruction	Elective	None	ICT441



ICTSAS442	Provide first-level remote help desk support	Specialist Elective	None	SAS442
ICTSAS438	Implement maintenance procedures	Specialist Elective	None	SAS4C2MSS
ICTSAS441	Support ICT system software	Specialist Elective	None	SAS4C2MSS
ICTICT445	Connect and configure devices and hardware components	Specialist Elective	None	SAS4C2
ICTSAS436	Evaluate ICT system status	Specialist Elective	None	SAS4C2



Subject Descriptions

Unit Code	IT Studies subject code	Description
ICTNWK424	NWK4C3CIN	This unit describes the skills and knowledge required to utilise networking fundamentals, including wide area network (WAN) technologies, basic security, route and switch operations as well as to configure simple networks.
		It applies to individuals involved in network support positions with the Information Communications Technologies (ICT) skills required to use tools, equipment, software and protocols to install, operate, a small enterprise branch network.
ICTTEN434	NWK4C3CIN	This unit describes the skills and knowledge required to identify required network elements according to specifications, install for interoperability within network, apply network topologies, protocols and security issues, and troubleshoot when required.
		It applies to individuals who are involved in installation, maintenance and upgrade of Information and Communications Technology (ICT) networks in telecommunications or Information Technology Networking provisioning companies.
ICTICT443	ICT443	This unit describes the skills required to work collaboratively in virtual Information and Communications (ICT) team environments to achieve organisational objectives. It includes contributing to performance and capability within teams, participating in team activities, exchanging knowledge and skills and providing support to team members.
		It applies to all individuals who work in teams that utilise multiple technologies to complete a collective task.
BSBCRT404	CRT404	This unit describes the skills and knowledge required to use advanced-level critical thinking skills in a professional context. This includes using methods of analysis, synthesis and evaluation.
		This unit applies to individuals who evaluate processes, products and services that may be proposed or already existing. This unit applies to individuals who are typically responsible for developing work processes, products and services that may be proposed or already existing.
ICTSAS443	SAS443WOS	This unit describes the skills and knowledge required to support users who run operating systems (OS) in a corporate or home environment and to troubleshoot applications on a range of Information and Communications Technology (ICT) devices.
		It applies to individuals who provide frontline support to users and apply technical and specialised knowledge to fault finding and problem solving.
ICTSAS432	SAS432	This unit describes the skills and knowledge required to identify, record, prioritise and resolve client Information and Communications Technology (ICT) support activities and escalate as required.
		It applies to experienced individuals who use specialised and technical knowledge to take responsibility in providing client-based ICT support to end users in an office or working environment.



ICTCLD401	CLD401ACF	This unit describes the skills and knowledge required to configure core cloud services including compute, storage, databases and autoscaling according to business needs and workload.
		The unit applies to cloud computing architects, developers and cloud engineers utilising cloud services and those engaged in deploying cloud computing solutions for a business.
ICTICT426	ICT426	This unit describes the skills and knowledge required to identify emerging technologies and practices in the ICT sector and evaluate their potential impact on organisational practices.
		It applies to individuals who work across a wide range of information technology (IT) areas, including technical support, network administration, web technologies, software applications and digital media technologies.
ICTPRG302	PRG302PYB	This unit describes the skills and knowledge required to create simple applications through introductory programming techniques.
		It applies to those who have responsibility for creating applications and includes applying language syntax, control structures to create code, using programming standards, testing and debugging.
ICTNWK422	NWK422ICW	This unit describes the skills and knowledge required to install and manage a server. It includes the ability to conduct initial configuration and testing, administration, software distribution and updates, profiling and troubleshooting.
		It applies to individuals with Information and Communications Technology (ICT) skills, involved in network management, server administration and similar roles.
ICTICT451	ICT451	This unit describes the skills and knowledge required to comply with the protection and lawful use of intellectual property (IP) and to implement relevant organisational ethics and privacy policies.
		It applies to individuals who are required to use IP owned by other persons and organisations, and to support organisations and stakeholders with the compliance of organisational ethics, and privacy policies.
BSBXCS404	XCS404	This unit describes the skills and knowledge required to contribute to cyber security risk management, which includes assisting in developing and managing associated risk management strategies.
		It applies to those working in a broad range of industries and job roles who work alongside technical experts to develop cyber security risk-management strategies.
BSBXBD403	XBD403PBI	This unit describes the skills and knowledge required to analyse transactional and non-transactional big data in order to provide insights that are used in an organisation. It involves identifying trends and relationships within big data and establishing data acceptability. It also involves forming recommendations based on the analysis and reporting on analysis findings.
		It applies to those who work in a broad range of industries and job roles using big data analysis techniques in their day-to-day work.



ICTSAS526	SAS526	This unit describes the skills and knowledge required to analyse the impact of the system on the organisation and carry out risk analysis, disaster recovery and contingency planning.
		It applies to individuals who apply a wide range of higher-level technical
		skills and systematic problem-solving approaches in Information and
		Communications Technology (ICT) related areas.
ICTICT441	ICT441	This unit describes the skills and knowledge required to convey technical information to an individual client for their specific use.
		It applies to individuals who are competent in a wide range of general Information and Communications Technologies (ICT), and support clients in technical areas, including instructing others on an individual basis.
ICTSAS442	SAS442	This unit describes the skills and knowledge required to resolve first-level user support issues and change requests remotely for a range of Information and Communications Technology (ICT) systems.
		It applies to experienced individuals who, while working under a level of supervision, have responsibility in a frontline technical support capacity to exercise discretion and judgement using required knowledge to provide assistance and remote help desk support to clients.
ICTSAS438	SAS4C2MSS	This unit describes the skills and knowledge required to improve existing organisational maintenance procedures to keep equipment and software operating effectively.
		It applies to individuals who use technical and specialised knowledge and apply a systematic approach to maintaining computer equipment in an organisation.
ICTSAS441	SAS4C2MSS	This unit describes the skills and knowledge required to support Information and Communications Technology (ICT) system software through the management of ICT system files, management of ICT system security, ICT system backups and ICT system restores.
		It applies to individuals who provide assistance and use technical and specialised knowledge and a systematic approach to tasks to ensure organisational standards are met in maintaining operating systems.
ICTICT445	SAS4C2	This unit describes the skills and knowledge required to install and configure devices and hardware components including mobile devices.
		It applies to individuals who use a range of technical skills to configure and connect a device to other devices and maintain system components in a home or workplace environment.
ICTSAS436	SAS4C2	This unit describes skills and knowledge required to evaluate the status of a running system, covering both hardware and software aspects to determine system performance and reliability while Information and Communications Technology (ICT) system is still in an operational state.
		It applies to individuals who apply specialised and technical knowledge and a systematic approach to assessing and evaluating ICT systems prior to problem resolution or upgrades.



TAFE SA Study Plan for Full-Time Students (12 months)

The following table shows the recommended study plan for the Certificate IV in Information Technology (Systems Administration Support). Each stage is one semester (or 6 months) in length for Full-Time student*.

These are eligible for Subsidised Training

Please Note: This program structure is subject to change.

Stage 1			
Term 1	Term 2		
N	WK4C3CIN (4)		
	ICTNWK424		
ICTTEN434			
ICT443 (2)	CLD401ACF (4)		
ICTICT443	ICTCLD401		
CRT404 (2)	ICT426 (2)		
BSBCRT404	ICTICT426		
SAS443WOS (2)	PRG302PYB (2)		
ICTSAS443	ICTPRG302		
SAS432 (2)			
ICTSAS432			
Practical (8)	Practical (8)		
20 hrs / week	20 hrs / week		

Stage 2		
Term 1	Term 2	
NWK422ICW (4)	ICT441 (2)	
ICTNWK422	ICTICT441	
ICT451 (2)	SAS442 (2)	
ICTICT451	ICTSAS442	
XCS404 (2)	SAS4C2MSS (4)	
BSBXCS404	ICTSAS438	
	ICTSAS441	
XBD403PBI (2)	SAS4C2 (2)	
BSBXBD403	ICTICT445	
	ICTSAS436	
SAS526 (2)		
ICTSAS526		
Practical (8)	Practical (10)	
20 hrs / week	20 hrs / week	

Please Note: This program structure is subject to change.



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 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 16-20 hours a week of attendance. It is expected that an additional 12-15 hours would be required outside of class time to complete activities and assessments.

Click here to apply for this qualification

