VCE VET Cisco

Program Booklet

Incorporating

22519VIC Certificate IV in Integrated Technologies (partial completion),

providing recognition for Cisco CCNAv7

January 2021

This program was first implemented in January 2018

Modification history

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| --- | --- | --- | --- |
| Version | Status | Release Date | Comments |
| 2.0 | Current | January 2021 | Change to CISCO V7 Units. Updated Program Booklet to new VCAA style guide and branding |
| 1.0 | Superseded | February 2018 | Original Program |

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Introduction

VCE VET programs are vocational training programs approved by the Victorian Curriculum and Assessment Authority (VCAA). VCE VET programs lead to nationally recognised qualifications, thereby offering students the opportunity to gain both the VCE and a nationally portable vocational education and training (VET) certificate. VCE VET programs:

* are fully recognised within the Units 1 to 4 structure of the Victorian Certificate of Education (VCE) and therefore may contribute towards satisfactory completion of the VCE. VCE VET units have equal status with other VCE studies
* may contribute to the satisfactory completion of the Victorian Certificate of Applied Learning (VCAL)
* function within the National Training Framework.

Program development

This iteration of the VCE VET Cisco program was implemented in 2018. It must be used in conjunction with the Victorian accredited curriculum, 22519VIC Certificate IV in Integrated Technologies as well as the Cisco Networking Academy’s Cisco CCNA curriculum. This program replaces the VCE VET Cisco program published in February 2018 and all subsequent program summaries. This revision to the VCE VET Cisco program is a consequence of the significant changes to the Cisco Certified Network Associate (CCNA) curricula during 2020.

The VCE VET Cisco program provides students with the knowledge and skills to enhance their employment prospects in the information and communications technology industry.

Program information

This program booklet must be read in conjunction with the *VCE VET Program Guide*, the Victorian accredited curriculum 22519VIC Certificate IV in Integrated Technologies as well as the Cisco Networking Academy’s Cisco CCNA curriculum.

Industry overview

The Cisco course is mainly targeted at new entrants into the workforce, such as school leavers, who want to gain employment as technicians.

There is no single source of employment for graduates from this course. Rather, skills developed in the course will prepare graduates to undertake work across a diverse range of activities in technology fields which are emerging. Typical job roles are process control manufacturing, medical equipment servicing, telecommunications, building automation, computer networking, transport/automotive renewable energy, electrical and electronics engineering etc.

VCE VET Program details

Aims

The purpose of this course is to provide learners with knowledge and skills in a range of technologies. Students will blend these technologies into new and innovative applications and then service and maintain them.

School leavers who want to gain employment in a technical role in a range of industry areas are the primary target group for this course. The course also provides a pathway for tradespeople in the electrotechnology or engineering industries, to upskill to a leading tradesperson, technician or technical officer role.

The VCE VET Cisco program aims to provide:

* training and practical skills to manage and optimise network systems ranging from small or home office to more complex enterprises.
* the knowledge and skills required to undertake the examination for the internationally recognised Cisco qualification Cisco Certified Network Associate (CCNA).
* enhanced employment opportunities and pathways to further education and training in the information and communications technology field. It also provides advanced problem solving and analytical skills appropriate for studies in engineering, mathematics or science.

The VCE VET Cisco program has been structured to provide recognition for CCNA certification. The CCNA curriculum is comprised of three ‘blocks’:

* Introduction to Networks
* Switching, Routing and Wireless Essentials and
* Enterprise Networking, Security and Automation

Program structure

The VCE VET Cisco program allows for credit in the VCE and VCAL, recognition for Cisco CCNA v7, and partial completion of a nationally recognised qualification. This qualification is an endorsed accredited curriculum which can be found at: <[www.education.vic.gov.au/Documents/training/providers/rto/22519VIC-Certificate\_IV\_in\_Integrated\_Technologies.pdf](https://www.education.vic.gov.au/Documents/training/providers/rto/22519VIC-Certificate_IV_in_Integrated_Technologies.pdf)>.

The following information needs to be read in conjunction with the state accredited curriculum for 22519VIC Certificate IV in Integrated Technologies as well as the Cisco Networking Academy’s Cisco CCNA curriculum.

For VASS recording purposes schools are required to enroll into **Certificate type VE1, CISCO v7**.

The VCE VET Cisco structure is comprised of two 190 hour ‘programs’:

**Program A:** VU22963 **–** Build and implement a basic network **–** 100 hours

(Aligned with CCNA Introduction to Networks)

VU22964 **–** Configure a small to medium network for an organisation **–** 90 hours

(Aligned with CCNA Switching, Routing and Wireless Essentials)

Students undertaking Program A are eligible for up to two VCE VET units on their VCE Statement of Results. These units are at Units 3 and 4 level.

**Program B:** VU22965 **–** Secure and monitor the performance of a small to medium network – 100 hours

(Aligned with CCNA Switching, Routing and Wireless Essentials)

VU22966 **–** Investigate design concepts of an accessible and secure network – 90 hours

(Aligned with CCNA Enterprise Networking, Security and Automation)

Students undertaking Program B are eligible for up to two VCE VET units on their VCE Statement of Results. These units are at Units 3 and 4 level.

VCE VET Credit

Students undertaking the VCE VET Cisco program are eligible for up to four VCE VET units on their VCE or VCAL statement of results:

* two VCE VET Units 3 and 4 sequences.

VCE VET credit will accrue in the following order: Units 3, 4, 3 and 4. These units of credit may be accumulated over more than one year.

Nominal hour duration

Nominal hours represent the supervised structured learning and assessment activities required to sufficiently address the content of each unit of competency.

Nominal hours are used to determine credit into the VCE or VCAL for VET units of competency.

Duplication

When a VCE VET program significantly duplicates other VCE studies or VET training in a student’s program, a reduced VCE VET unit entitlement may apply. Credit towards the VCAL may also be reduced due to duplication.

No significant duplication has been identified between the VCE VET Cisco program and other VCE studies.

Sequence

The following considerations should be used in determining the sequence of a student’s VCE VET Cisco program:

* it is recommended that Program A be delivered before Program B; however, delivery is at the discretion of the provider and a range of sequences is possible.

VCE VET Cisco program structure

CISCO22519VIC Cisco – CCNA v7

For VASS recording purposes schools are required to enroll into **Certificate type VE1, CISCO v7**.

|  |  |  |
| --- | --- | --- |
| Code | Unit Title | Nominal Hours |
| **Units 3 and 4** |
| **Compulsory units: Program A** |
| VU22963 | Build and implement a basic network | 100 |
| VU22964 | Configure a small to medium network for an organisation | 90 |
| **Subtotal:** | **190** |
| **Compulsory units: Program B** |
| VU22965 | Secure and monitor the performance of a small to medium network | 100 |
| VU22966 | Investigate design concepts of an accessible and secure network | 90 |
| **Subtotal:** | **190** |
| **Total for VCE VET Cisco Program:** | **380** |

ATAR Contribution

The VCE VET Cisco program does not offer scored assessment. A student who achieves a Units 3 and 4 sequence may be eligible for an increment towards their ATAR.

The increment is awarded by the Victorian Tertiary Admissions Centre (VTAC). Further information can be found on the VTAC website:

* the ATAR explained: <[www.vtac.edu.au/results-offers/atar-explained/](https://www.vtac.edu.au/results-offers/atar-explained/)>
* calculating your aggregate: <[www.vtac.edu.au/atar-scaling-guide-2022.html#item-3](https://www.vtac.edu.au/atar-scaling-guide-2022.html#item-3)>
* study groupings: <[www.vtac.edu.au/atar-scaling-guide-2022.html#item-4](https://www.vtac.edu.au/atar-scaling-guide-2022.html#item-4)>.

Increments for VCE VET programs will be calculated using 10% of the fourth study score of the primary four.

Work health and safety

Schools/RTOs must ensure that Work Health and Safety (WHS) issues are fully addressed in the training program.

The principal is responsible for ensuring the school meets its responsibilities for students in SWL arrangements.

Where the student will be employed under an SWL arrangement, the principal must be satisfied that the student is undertaking training in the WHS unit of competency before the arrangement can be entered into.

Students must be informed of the significance of work-related hazards. They must understand the need for, and the nature of, workplace risk controls such as safe working procedures and the use of personal protective clothing and equipment.

Schools must also be satisfied, through their review of the acknowledgment provided by employers on the SWL Arrangement form, that the workplace in question and the activities proposed will not expose a student to risk during their structured work placement.

Employers must view their duty of care towards students as essentially no different from that owed to their employees. They must understand that students cannot be expected to possess the judgment or maturity to undertake any task that presents potential risk. This means that no student may be exposed at any time to dangerous plant machinery, equipment, substances, work environments or work practices.

On the first morning of their placement, students should be introduced to their supervisor and provided with a formal induction to the workplace. This will include first aid, emergency and incident reporting arrangements.

The student should be given an orientation tour of the workplace and any excluded areas or activities should be pointed out. Students should be instructed to report without delay anything they feel may be unsafe. They should be encouraged to ask for help or further instruction if they are not sure of the correct way to carry out any task.

Close supervision of students undertaking SWL is essential. Supervisors nominated by the employer must understand all requirements for safely managing the student’s activities. Supervisors must understand that a student may not fully grasp information or instructions the first time they are told. They should encourage students to ask for help if they have forgotten or if they experience difficulty in putting information into practice.

The WorkSafe Victoria website makes available useful resources: <[www.worksafe.vic.gov.au](https://www.worksafe.vic.gov.au/)>.

Additional information

For updates or information relating to this program refer to:

* the VCE VET Cisco program web page: <[www.vcaa.vic.edu.au/curriculum/vet/vce-vet-programs/Pages/cisco.aspx](https://www.vcaa.vic.edu.au/curriculum/vet/vce-vet-programs/Pages/cisco.aspx)>
* the *VCAA* *Bulletin*: <[www.vcaa.vic.edu.au/news-and-events/bulletins-and-updates/bulletin/Pages/index.aspx](https://www.vcaa.vic.edu.au/news-and-events/bulletins-and-updates/bulletin/Pages/index.aspx)>
* the Get VET web page for videos, success stories, flowcharts and posters designed to support teachers in engaging, informing and inspiring students and parents about VET Delivered to Secondary Students: <[www.vcaa.vic.edu.au/getvet](https://www.vcaa.vic.edu.au/getvet)>.

Pathways

The VCE VET Cisco program opens up many different training and employment pathways. The VCAA recommends study at the lower levels to develop industry foundation skills before moving to higher level qualifications.

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| --- | --- | --- | --- | --- |
| **Certificate IV****Diploma/****Advanced Diploma** |  | CISCO V7 Partial Certificate IV in Integrated Technologies |  | Focusing on:* Introduction to Networks
* Switching, Routing and Wireless
* Enterprise Networking, Security and Automation.
 |
| Certificate IV in Cyber Security | Focusing on:* networking basics and IT skills required for cyber security
* system testing procedures
* data collection and analysis
* securing a web site
* implementing network security
* managing a cyber security system
* incident response plans
* cyber security project.
 |
| Diploma/Adv Diploma of Engineering Technology | Specialisations in:* Computer systems
* Electrical/Electronics
* Renewable Energy.
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|  |  |  |  |  |
| **Higher Education** |  | Bachelor of Science Bachelor of Computer ScienceBachelor of EngineeringBachelor of TelecommunicationsMaster’s degrees |