VET in the VCE AUTOMOTIVE

21560VIC CERTIFICATE II in AUTOMOTIVE TECHNOLOGY STUDIES

August 2005

This program booklet must be used in conjunction with the accredited curriculum document

Acknowledgments

The Victorian Curriculum and Assessment Authority gratefully acknowledges the work of the following people in the preparation of this booklet:

Gary Creighton Alexandra Secondary College
Michael Donovan Salesian College Sunbury

Kevin Farley Bendigo Senior Secondary College

Joseph Galea Sunshine College
Chris Grant Swan Hill College

Alan Gregory Chisholm Institute of TAFE

Paul HarringtonKangan Batman Institute of TAFERobert InglisSacred Heart College KynetonSteve PennaSt Helena Secondary CollegeSteve SandfordBentleigh Secondary CollegeAnthony TaylorStawell Secondary CollegeMichael ValestroKangan Batman Institute of TAFEGreg WalshAutomotive Training Victoria

© Victorian Curriculum and Assessment Authority 2005

Published by the Victorian Curriculum and Assessment Authority

41 St Andrews Place Victoria 3002

ISBN 1 920992 39 1 First published 2005

All rights reserved. Except under the conditions described in the *Copyright Act 1968* and subsequent amendments, and except for the exemption below, no part of this publication may be reproduced by any process without permission in writing from the publishers. Photocopying: Victorian schools and TAFE institutes only may photocopy this publication for use by teachers.

The artwork on the cover has been reproduced from 1998 VCE student work:

Clare James Can Opener 1998 (detail) Ink, gouache and oil stick on paper 188 x 152.5 cm

Copyright remains the property of the artist.

CONTENTS

2	Introduction National Training Framework Program revision Arrangements for continuing students Students commencing in 2006 and beyond
3	Program details Aims Completion requirements VCE VET program structure
4	Program duration
5 7	Program structure Sequence
8	Structured Workplace Learning (SWL)
9	Occupational Health And Safety
10	Recognition within the VCE VCE VET Unit Entitlement Duplication
11	Equivalent National Tertiary Entrance Rank (ENTER)
13	Recognition within the VCAL
13	Delivery and assessment Role of Registered Training Organisations
14	Delivery options Delivery in schools
16	Delivery in schools Delivery in the workplace Assessment
17	Resources
18	Administration Enrolments Recording results VCE VET unit completion
19	Reporting Certification
20	Articulation and pathways
21	Registration
22	Useful contacts and information sources
24	Glossary
26	Appendix: Pre-apprenticeship descriptors

Introduction

VCE VET programs are vocational certificates approved by the Victorian Curriculum and Assessment Authority (VCAA) as appropriate for senior secondary school students, fully integrated within the VCE and endorsed for recognition in the VCE by the Victorian Qualifications Authority (VQA).

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 certificate.

VCE VET programs:

- are fully recognised within the Unit 1–4 structure of the 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.

NATIONAL TRAINING FRAMEWORK

The two key elements of the National Training Framework are the Australian Quality Training Framework (AQTF) and training packages. Under the AQTF, Registered Training Organisations (RTOs) are responsible for the assessment and certification of training qualifications, regardless of whether programs are curriculum based or based on training packages.

National training packages are agreed to by Industry Skills Councils (formerly Industry Training Advisory Bodies) and endorsed by the Australian National Training Authority (ANTA). Training packages consist of a set of competency standards, assessment guidelines and national qualifications that apply across an industry. These packages underpin delivery of training by RTOs and industry.

The 21560VIC Certificate II in Automotive Technology Studies includes units of competence from the AUR05 Automotive Industry Retail, Services and Repair Training Package and BSB01 Business Services Training Package. A National Communication Skills module has also been included in the certificate. All the other units of competence are new and have been specifically designed for this certificate. The certificate has been accredited by the VQA as a nationally recognised qualification.

PROGRAM REVISION

This program booklet replaces the VCE VET Automotive booklet published in December 2000.

ARRANGEMENTS FOR CONTINUING STUDENTS

Students enrolled in the VCE VET Automotive program in 2005 or earlier, should complete their program under the arrangements outlined in the VCE VET Automotive booklet published in December 2000. No new students may enrol in 21110VIC Certificate II in Automotive Technology in 2006 and beyond.

STUDENTS COMMENCING IN 2006 AND BEYOND

All students commencing VCE VET Automotive in 2006 and beyond must comply with the requirements outlined in this booklet.

Program details

AIMS

The aims of the VCE VET Automotive program are to:

- provide participants with the knowledge and skills to achieve units of competence that will enhance their employment prospects in the automotive or automotive related industries
- enable participants to gain a recognised credential and make a more informed choice of vocation and career paths.

The Certificate II in Automotive Technology Studies can provide a pathway into an automotive traineeship or apprenticeship.

COMPLETION REQUIREMENTS

The following information needs to be read in conjunction with the course accreditation document for 21560VIC Certificate II in Automotive Technology Studies.

Structure of the qualification

To be eligible to receive 21560VIC Certificate II in Automotive Technology Studies students must successfully complete the core compulsory units of competence *VBN644 Carry out industry research* (40 hours) and *AURC270103A Apply safe working practices* (20 hours) and elective units to satisfy the minimum requirements for the qualification.

Students who partially complete the qualification will be issued with a Statement of Attainment for all units of competence successfully achieved.

This qualification offers a number of pre-apprenticeship outcomes. Model pre-apprenticeships are provided as an Appendix (page 26) to this booklet. These training programs have been developed by industry bodies.

The units of competence have been grouped to form VCE VET Units 1–2 and a VCE VET Unit 3–4 sequence for recognition purposes.

VCE VET PROGRAM STRUCTURE

In consultation with industry, schools and TAFE Institutes, the VCAA has prescribed a number of units of competence in the VCE VET Automotive program. The VCE VET Automotive program is compliant with the requirements of the accredited curriculum document and the prescribed units of competence have been selected to enhance the acquisition of a broad range of skills.

PROGRAM DURATION

The VCE VET Automotive program consists of a minimum nominal duration of 400 hours.

The nominal hours attached to each unit of competence are calculated by the Office of Training and Tertiary Education (OTTE) for funding purposes. They are a guide only, and the actual duration of the training required is affected by students' readiness to be assessed for the particular unit of competence.

It is important to note that the allocation of nominal hours for each unit of competence is intended to cover both delivery and assessment.

PROGRAM STRUCTURE

21560VIC Certificate II in Automotive Technology Studies

	VCE VET Units 1–2	
Code	Unit of competence	Nominal Hours
Compulsory uni	ts	
VBN644	Carry out industry research	40
AURC270103A	Apply safe working practices	20
NCS003	Job seeking skills	20
Schools/RTOs a	ast TWO of the following electives. are encouraged to consult the model pre-apprenticeship pathway rticulation arrangements into an automotive apprenticeship, listed 26).	
AURT225667A	Use and maintain measuring equipment	15
*VBN668	Operate electrical test equipment	40
VBN674	Remove and refit batteries	15
VBN675	Recharge batteries	15
BSBCMN205A	Use business technology	30
VBN685	Apply sealants	10
AURC251356A	Read in the workplace	10
AURC251677A	Use numbers in the workplace	10
AURC270789A	Communicate effectively in the workplace	20
VBN647	Clean a vehicle	20
	Subtotal	110–150
	tives of between 50–90 hours to bring the total to 200 hours. Thes in the list above or may be selected from the specialist sectors.	e electives may
	TOTAL	200
	VCE VET Units 3–4	
SPECIALIST SE	CTORS	
Choose 200 hou	urs of specialist sector electives to achieve the qualification	
	are encouraged to consult the model pre-apprenticeship pathway rticulation arrangements into an automotive apprenticeship, listed 26).	
	Subtotal	200
	TOTAL	400

Note: *VBN668 Operate electrical test equipment* is a prerequisite for electrical and electronics units of competence that have an asterisk (*). See elective bank.

Remove and replace engine and transaxle assembly (FWD) 20 VBN650 Dismantle and assemble engine, two-stroke single cylinder petrol 40 VBN651 Dismantle and assemble engine, four-stroke single cylinder petrol 40 VBN652 Dismantle and assemble engine, four-stroke multi cylinder petrol 40 VBN653 Remove and replace engine cylinder head 20 VBN654 Remove and replace engine cylinder head 20 VBN655 Dismantle and assemble carburettor 20 VBN656 Remove and replace tell pump 10 VBN657 Dismantle and assemble fuel pump 20 VBN658 Remove and replace transmission, manual (conventional) 20 VBN659 Dismantle and assemble transmission, manual (conventional) 40 VBN660 Remove and replace transmission, manual (transaxle) 20 VBN661 Dismantle and assemble transmission, manual (transaxle) 40 VBN662 Remove and replace clutch assembly 20 VBN663 Remove and replace clutch assembly 20 VBN664 Remove and replace suspension, front springs 25 VBN665 Remove and replace suspension, rear springs 25 VBN666 Remove and replace brake assemblies 20 VBN666 Remove and replace brake assemblies 20 VBN667 Remove and replace suspension, rear springs 25 VBN668 Remove and replace suspension, rear springs 25 VBN669 Construct lighting circuits* 40 VBN669 Construct lighting circuits* 40 VBN671 Dismantle and assemble alternator* 40 VBN672 Remove and replace starter motor* 40 VBN673 Dismantle and assemble starter motor* 40 VBN671 Dismantle and assemble starter motor* 40 VBN672 Remove and replace starter motor* 40 VBN673 Dismantle and assemble starter motor* 40 VBN674 Construct basic electronic circuits* 40 VBN675 MBN676 Construct basic electronic circuits* 40 VBN677 Construct microcomputer circuits* 40 VBN678 Maintain vehicle body repair/making hand tools 20 VBN679 Carry out panel beating hand skill procedures 35 VBN681 Remove and realign body panels 40 VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment	Code	Unit of competence	Nominal Hours
VBN648 Remove and replace engine assembly (conventional) 20 VBN649 Remove and replace engine and transaxle assembly (FWD) 20 VBN650 Dismantle and assemble engine, two-stroke single cylinder petrol 40 VBN651 Dismantle and assemble engine, four-stroke single cylinder petrol 40 VBN652 Dismantle and assemble engine, four-stroke multi cylinder petrol 40 VBN653 Remove and replace engine cylinder head 20 VBN655 Remove and replace carburettor 10 VBN655 Dismantle and assemble carburettor 20 VBN656 Remove and replace fuel pump 10 VBN657 Dismantle and assemble curburettor 20 VBN658 Remove and replace fuel pump 20 VBN659 Dismantle and assemble transmission, manual (conventional) 20 VBN659 Dismantle and assemble transmission, manual (conventional) 40 VBN660 Remove and replace transmission, manual (transaxle) 20 VBN661 Dismantle and assemble transmission, manual (transaxle) 40 VBN662 Remove and replace clutch assembly 20 VBN663 Remove and replace clutch assembly 20 VBN664 Remove and replace suspension, front springs 25 VBN665 Remove and replace suspension, rear springs 25 VBN666 Remove and replace brake assemblies 20 VBN666 Remove and replace brake assemblies 20 VBN667 Remove and replace suspension, rear springs 25 VBN669 Construct lighting circuits* 40 VBN667 Remove and replace stering assembly 20 AUTOMOTIVE ELECTRICAL AND ELECTRONICS VBN669 Construct lighting circuits* 40 VBN671 Dismantle and assemble alternator* 40 VBN672 Remove and replace starter motor* 40 VBN673 Dismantle and assemble starter motor* 40 VBN674 Remove and replace starter motor* 40 VBN675 Construct basic electronic circuits* 40 VBN676 Construct basic electronic circuits* 40 VBN677 Construct microcomputer circuits* 40 VBN678 Maintain vehicle body repair/making hand tools 20 VBN679 Carry out panel beating hand skill procedures 35 VBN681 Remove and realign body panels 40 VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment 40	ELECTIVE B	ANK	
VBN649 Remove and replace engine and transaxle assembly (FWD) VBN650 Dismantle and assemble engine, two-stroke single cylinder petrol 40 VBN651 Dismantle and assemble engine, four-stroke single cylinder petrol 40 VBN652 Dismantle and assemble engine, four-stroke multi cylinder petrol 40 VBN653 Remove and replace engine cylinder head 20 VBN654 Remove and replace carburettor 20 VBN655 Dismantle and assemble carburettor 20 VBN655 Dismantle and assemble carburettor 20 VBN657 Dismantle and assemble fuel pump 20 VBN658 Remove and replace transmission, manual (conventional) 20 VBN659 Dismantle and assemble fuel pump 20 VBN660 Remove and replace transmission, manual (conventional) 40 VBN661 Dismantle and assemble transmission, manual (transaxle) 20 VBN661 Dismantle and assemble transmission, manual (transaxle) 40 VBN662 Remove and replace clutch assembly 20 VBN663 Remove and replace suspension, front springs 25 VBN664 Remove and replace suspension, front springs 25 VBN665 Remove and replace brake assemblies 20 VBN666 Remove and replace brake assemblies 20 VBN667 Remove and replace suspension, rear springs 25 VBN668 Remove and replace suspension, rear springs 26 VBN669 Construct lighting circuits* VBN669 Construct lighting circuits* VBN671 Dismantle and assemble alternator* 40 VBN672 Remove and replace slarter motor* VBN673 Dismantle and assemble starter motor* VBN674 Construct basic electronic circuits* VBN675 Construct microcomputer circuits* 40 VBN676 Construct basic electronic circuits* 40 VBN677 Construct microcomputer circuits* 40 VBN678 Maintain vehicle body repair/making hand tools 20 VBN678 Maintain vehicle body repair/making hand tools 20 VBN678 Maintain vehicle body repair/making hand tools 20 VBN681 Remove and realign body panels 40 VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment	Automotive r	mechanical	
VBN650 Dismantle and assemble engine, two-stroke single cylinder petrol VBN651 Dismantle and assemble engine, four-stroke single cylinder petrol 40 VBN652 Dismantle and assemble engine, four-stroke multi cylinder petrol 40 VBN653 Remove and replace engine cylinder head 20 VBN654 Remove and replace carburettor 10 VBN655 Dismantle and assemble carburettor 20 VBN655 Dismantle and assemble carburettor 20 VBN656 Remove and replace fuel pump 10 VBN657 Dismantle and assemble fuel pump 20 VBN658 Remove and replace fuel pump 20 VBN658 Remove and replace transmission, manual (conventional) 20 VBN659 Dismantle and assemble transmission, manual (conventional) 40 VBN659 Dismantle and assemble transmission, manual (transaxle) 20 VBN660 Remove and replace transmission, manual (transaxle) 40 VBN661 Dismantle and assemble transmission, manual (transaxle) 40 VBN662 Remove and replace clutch assembly 20 VBN664 Remove and replace suspension, front springs 25 VBN664 Remove and replace suspension, rear springs 25 VBN666 Remove and replace brake assemblies 20 VBN666 Remove and replace brake assemblies 20 VBN666 Remove and replace brake assemblies 20 VBN667 Remove and replace brake assemblies 20 VBN669 Remove and replace transmission, manual (transaxle) 40 VBN667 Remove and replace transmission, rear springs 25 VBN669 Remove and replace steering assembly 20 VBN667 Remove and replace steering assembly 20 VBN670 Remove and replace steriter motor* 40 VBN671 Dismantle and assemble alternator* 40 VBN672 Remove and replace steriter motor* 40 VBN673 Dismantle and assemble starter motor* 40 VBN676 Construct basic electronic circuits* 40 VBN677 Construct microcomputer circuits* 40 VBN679 Carry out panel beating hand skill procedures 35 VBN681 Remove and realign body panels 40 VBN682 Carry out basic panel repair (40 VBN683 Set up body alignment equipment 40	VBN648	Remove and replace engine assembly (conventional)	20
VBN651 Dismantle and assemble engine, four-stroke single cylinder petrol 40 VBN652 Dismantle and assemble engine, four-stroke multi cylinder petrol 40 VBN653 Remove and replace engine cylinder head 20 VBN654 Remove and replace carburettor 10 VBN655 Dismantle and assemble carburettor 20 VBN656 Remove and replace fuel pump 10 VBN657 Dismantle and assemble fuel pump 20 VBN658 Remove and replace transmission, manual (conventional) 20 VBN659 Dismantle and assemble transmission, manual (conventional) 20 VBN660 Remove and replace transmission, manual (conventional) 40 VBN660 Remove and replace transmission, manual (transaxle) 20 VBN661 Dismantle and assemble transmission, manual (transaxle) 40 VBN662 Remove and replace clutch assembly 20 VBN663 Remove and replace suspension, front springs 25 VBN664 Remove and replace suspension, rear springs 25 VBN665 Remove and replace brake assemblies 20 VBN666 Remove and replace wheel and tyre assemblies 10 VBN667 Remove and replace steering assembly 20 VBN668 Remove and replace steering assembly 20 VBN669 Construct lighting circuits* 40 VBN670 Remove and replace steering assembly 30 VBN671 Dismantle and assemble alternator* 40 VBN672 Remove and replace starter motor* 40 VBN673 Dismantle and assemble starter motor* 40 VBN676 Construct basic electronic circuits* 40 VBN677 Construct microcomputer circuits* 40 VBN678 Maintain vehicle body repair/making hand tools 20 VBN679 Carry out panel beating hand skill procedures 35 VBN680 Carry out panel beating hand skill procedures 35 VBN681 Remove and realign body panels 40 VBN682 Carry out body alignment equipment 40	VBN649	Remove and replace engine and transaxle assembly (FWD)	20
VBN652 Dismantle and assemble engine, four-stroke multi cylinder petrol VBN653 Remove and replace engine cylinder head 20 VBN654 Remove and replace carburettor 10 VBN655 Dismantle and assemble carburettor 20 VBN656 Remove and replace fuel pump 10 VBN657 Dismantle and assemble fuel pump 20 VBN657 Dismantle and assemble fuel pump 20 VBN658 Remove and replace transmission, manual (conventional) 20 VBN659 Dismantle and assemble transmission, manual (conventional) 40 VBN660 Remove and replace transmission, manual (transaxle) 20 VBN661 Dismantle and assemble transmission, manual (transaxle) 40 VBN661 Dismantle and assemble transmission, manual (transaxle) 20 VBN663 Remove and replace clutch assembly 20 VBN664 Remove and replace suspension, front springs 25 VBN664 Remove and replace suspension, front springs 25 VBN665 Remove and replace suspension, rear springs 25 VBN666 Remove and replace wheel and tyre assemblies 20 VBN666 Remove and replace wheel and tyre assemblies 10 VBN667 Remove and replace steering assembly 20 VBN669 Construct lighting circuits* 40 VBN670 Remove and replace alternator* 40 VBN671 Dismantle and assemble alternator* 40 VBN672 Remove and replace starter motor* 40 VBN673 Dismantle and assemble starter motor* 40 VBN673 Dismantle and assemble starter motor* 40 VBN676 Construct basic electronic circuits* 40 VBN679 Carry out panel beating hand skill procedures 35 VBN680 Carry out panel beating hand skill procedures 35 VBN680 Carry out panel beating hand skill procedures 35 VBN681 Remove and realign body panels 40 VBN682 Carry out basic panel repair	VBN650	Dismantle and assemble engine, two-stroke single cylinder petrol	40
VBN653 Remove and replace engine cylinder head VBN654 Remove and replace carburettor VBN655 Dismantle and assemble carburettor VBN656 Remove and replace fuel pump 10 VBN657 Dismantle and assemble fuel pump 20 VBN658 Remove and replace transmission, manual (conventional) VBN659 Dismantle and assemble transmission, manual (conventional) VBN660 Remove and replace transmission, manual (transaxle) 20 VBN661 Dismantle and assemble transmission, manual (transaxle) 20 VBN662 Remove and replace clutch assembly 20 VBN663 Remove and replace clutch assembly 20 VBN664 Remove and replace suspension, front springs 25 VBN665 Remove and replace suspension, rear springs 25 VBN666 Remove and replace brake assemblies 20 VBN666 Remove and replace wheel and tyre assemblies 10 VBN667 Remove and replace steering assembly 20 AUTOMOTIVE ELECTRICAL AND ELECTRONICS VBN669 Construct lighting circuits* 40 VBN670 Remove and replace alternator* 40 VBN671 Dismantle and assemble alternator* 40 VBN672 Remove and replace starter motor* 40 VBN673 Dismantle and assemble starter motor* 40 VBN670 Construct basic electronic circuits* 40 VBN677 Construct microcomputer circuits* 40 VBN678 Maintain vehicle body repair/making hand tools 40 VBN679 Carry out panel beating hand skill procedures 35 VBN680 Carry out visual damage assessment 40 VBN681 Remove and realign body panels 40 VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment	VBN651	Dismantle and assemble engine, four-stroke single cylinder petrol	40
WBN654 Remove and replace carburettor 20 WBN655 Dismantle and assemble carburettor 20 WBN656 Remove and replace fuel pump 10 WBN657 Dismantle and assemble fuel pump 20 WBN658 Remove and replace transmission, manual (conventional) 20 WBN659 Dismantle and assemble transmission, manual (conventional) 40 WBN660 Remove and replace transmission, manual (transaxle) 20 WBN661 Dismantle and assemble transmission, manual (transaxle) 40 WBN662 Remove and replace clutch assembly 20 WBN663 Remove and replace suspension, front springs 25 WBN664 Remove and replace suspension, rear springs 25 WBN665 Remove and replace brake assemblies 20 WBN666 Remove and replace wheel and tyre assemblies 10 WBN667 Remove and replace steering assembly 20 WBN669 Construct lighting circuits* 40 WBN670 Remove and replace alternator* 45 WBN671 Dismantle and assemble alternator* 45 WBN672 Remove and replace starter motor* 40 WBN671 Dismantle and assemble starter motor* 40 WBN673 Dismantle and assemble starter motor* 40 WBN676 Construct basic electronic circuits* 40 WBN677 Construct microcomputer circuits* 40 WBN678 Maintain vehicle body repair/making hand tools 20 WBN679 Carry out panel beating hand skill procedures 35 WBN680 Carry out visual damage assessment 20 WBN681 Remove and realign body panels 40 WBN682 Carry out basic panel repair	VBN652	Dismantle and assemble engine, four-stroke multi cylinder petrol	40
VBN655 Dismantle and assemble carburettor 20 VBN656 Remove and replace fuel pump 10 VBN657 Dismantle and assemble fuel pump 20 VBN658 Remove and replace transmission, manual (conventional) 20 VBN659 Dismantle and assemble transmission, manual (conventional) 40 VBN660 Remove and replace transmission, manual (transaxle) 20 VBN661 Dismantle and assemble transmission, manual (transaxle) 40 VBN662 Remove and replace clutch assembly 20 VBN663 Remove and replace suspension, front springs 25 VBN664 Remove and replace suspension, rear springs 25 VBN665 Remove and replace suspension, rear springs 25 VBN666 Remove and replace brake assemblies 20 VBN666 Remove and replace wheel and tyre assemblies 10 VBN667 Remove and replace steering assembly 20 VBN669 Construct lighting circuits* 40 VBN669 Construct lighting circuits* 40 VBN670 Remove and replace alternator* 15 VBN671 Dismantle and assemble alternator* 40 VBN672 Remove and replace starter motor* 40 VBN673 Dismantle and assemble starter motor* 40 VBN676 Construct basic electronic circuits* 40 VBN677 Construct microcomputer circuits* 40 VBN678 Maintain vehicle body repair/making hand tools 20 VBN679 Carry out panel beating hand skill procedures 35 VBN680 Carry out visual damage assessment 20 VBN681 Remove and realign body panels 40 VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment 40	VBN653	Remove and replace engine cylinder head	20
WBN656 Remove and replace fuel pump 10 WBN657 Dismantle and assemble fuel pump 20 WBN658 Remove and replace transmission, manual (conventional) 20 WBN659 Dismantle and assemble transmission, manual (conventional) 40 WBN660 Remove and replace transmission, manual (transaxle) 20 WBN661 Dismantle and assemble transmission, manual (transaxle) 40 WBN662 Remove and replace clutch assembly 20 WBN663 Remove and replace suspension, front springs 25 WBN664 Remove and replace suspension, rear springs 25 WBN665 Remove and replace brake assemblies 20 WBN666 Remove and replace wheel and tyre assemblies 10 WBN667 Remove and replace steering assembly 20 WBN669 Remove and replace steering assembly 20 WUNDMOTIVE ELECTRICAL AND ELECTRONICS WBN669 Construct lighting circuits* 40 WBN670 Remove and replace alternator* 15 WBN671 Dismantle and assemble alternator* 40 WBN672 Remove and replace starter motor* 40 WBN673 Dismantle and assemble starter motor* 40 WBN676 Construct basic electronic circuits* 40 WBN677 Construct microcomputer circuits* 40 WBN678 Maintain vehicle body repair/making hand tools 20 WBN679 Carry out panel beating hand skill procedures 35 WBN680 Carry out visual damage assessment 20 WBN681 Remove and realign body panels 40 WBN683 Set up body alignment equipment 40	VBN654	Remove and replace carburettor	10
VBN657 Dismantle and assemble fuel pump 20 VBN658 Remove and replace transmission, manual (conventional) 20 VBN659 Dismantle and assemble transmission, manual (conventional) 40 VBN660 Remove and replace transmission, manual (transaxle) 20 VBN661 Dismantle and assemble transmission, manual (transaxle) 40 VBN662 Remove and replace clutch assembly 20 VBN663 Remove and replace suspension, front springs 25 VBN664 Remove and replace suspension, rear springs 25 VBN665 Remove and replace brake assemblies 20 VBN666 Remove and replace wheel and tyre assemblies 10 VBN667 Remove and replace steering assembly 20 VBN692 Remove and replace steering assembly 20 VBN690 Construct lighting circuits* 40 VBN690 Construct lighting circuits* 40 VBN691 Dismantle and assemble alternator* 40 VBN692 Remove and replace starter motor* 40 VBN693 Dismantle and assemble starter motor* 40 VBN697 Remove and replace starter motor* 40 VBN6980 Construct basic electronic circuits* 40 VBN699 Construct microcomputer circuits* 40 VBN699 Construct basic electronic circuits* 40 VBN699 Construct microcomputer circuits* 40 VBN699 Carry out panel beating hand skill procedures 35 VBN699 Carry out visual damage assessment 20 VBN680 Carry out visual damage assessment 40 VBN681 Remove and realign body panels 40 VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment 40	VBN655	Dismantle and assemble carburettor	20
VBN658 Remove and replace transmission, manual (conventional) VBN659 Dismantle and assemble transmission, manual (conventional) VBN660 Remove and replace transmission, manual (transaxle) VBN661 Dismantle and assemble transmission, manual (transaxle) VBN662 Remove and replace clutch assembly VBN663 Remove and replace suspension, front springs 25 VBN664 Remove and replace suspension, rear springs 25 VBN665 Remove and replace brake assemblies 20 VBN666 Remove and replace wheel and tyre assemblies 10 VBN667 Remove and replace radiator VBN692 Remove and replace steering assembly 20 AUTOMOTIVE ELECTRICAL AND ELECTRONICS VBN669 Construct lighting circuits* 40 VBN670 Remove and replace alternator* 15 VBN671 Dismantle and assemble alternator* 40 VBN672 Remove and replace steer motor* 40 VBN673 Dismantle and assemble starter motor* 40 VBN676 Construct basic electronic circuits* 40 VBN677 Construct biscic electronic circuits* 40 VBN678 Maintain vehicle body repair/making hand tools 20 VBN679 Carry out panel beating hand skill procedures 35 VBN680 Carry out visual damage assessment 20 VBN681 Remove and realign body panels VBN682 Carry out basic panel repair VBN683 Set up body alignment equipment	VBN656	Remove and replace fuel pump	10
VBN659 Dismantle and assemble transmission, manual (conventional) VBN660 Remove and replace transmission, manual (transaxle) VBN661 Dismantle and assemble transmission, manual (transaxle) VBN662 Remove and replace clutch assembly 20 VBN663 Remove and replace suspension, front springs 25 VBN664 Remove and replace suspension, rear springs 25 VBN665 Remove and replace brake assemblies 20 VBN666 Remove and replace wheel and tyre assemblies 10 VBN667 Remove and replace radiator 20 VBN692 Remove and replace steering assembly 20 AUTOMOTIVE ELECTRICAL AND ELECTRONICS VBN669 Construct lighting circuits* 40 VBN670 Remove and replace alternator* 15 VBN671 Dismantle and assemble alternator* 40 VBN672 Remove and replace starter motor* 40 VBN673 Dismantle and assemble starter motor* 40 VBN676 Construct basic electronic circuits* 40 VBN677 Construct bisic electronic circuits* 40 VBN678 Maintain vehicle body repair/making hand tools 20 VBN679 Carry out panel beating hand skill procedures 35 VBN680 Carry out visual damage assessment 20 VBN681 Remove and realign body panels VBN683 Set up body alignment equipment 40 VBN683 Set up body alignment equipment	VBN657	Dismantle and assemble fuel pump	20
VBN660 Remove and replace transmission, manual (transaxle) VBN661 Dismantle and assemble transmission, manual (transaxle) VBN662 Remove and replace clutch assembly VBN663 Remove and replace suspension, front springs VBN664 Remove and replace suspension, rear springs 25 VBN665 Remove and replace brake assemblies 20 VBN666 Remove and replace wheel and tyre assemblies 10 VBN667 Remove and replace steering assembly 20 AUTOMOTIVE ELECTRICAL AND ELECTRONICS VBN669 Construct lighting circuits* VBN670 Remove and replace alternator* VBN671 Dismantle and assemble alternator* VBN672 Remove and replace starter motor* VBN673 Dismantle and assemble starter motor* VBN676 Construct basic electronic circuits* VBN677 Construct basic electronic circuits* VBN678 Maintain vehicle body repair/making hand tools VBN679 Carry out panel beating hand skill procedures 35 VBN680 Carry out visual damage assessment 20 VBN681 Remove and replair papair VBN682 Carry out basic panel repair VBN683 Set up body alignment equipment	VBN658	Remove and replace transmission, manual (conventional)	20
VBN661 Dismantle and assemble transmission, manual (transaxle) VBN662 Remove and replace clutch assembly VBN663 Remove and replace suspension, front springs VBN664 Remove and replace suspension, rear springs VBN665 Remove and replace brake assemblies VBN666 Remove and replace wheel and tyre assemblies 10 VBN667 Remove and replace radiator VBN692 Remove and replace steering assembly 20 AUTOMOTIVE ELECTRICAL AND ELECTRONICS VBN669 Construct lighting circuits* VBN670 Remove and replace alternator* VBN671 Dismantle and assemble alternator* VBN672 Remove and replace starter motor* VBN673 Dismantle and assemble starter motor* VBN676 Construct basic electronic circuits* VBN677 Construct basic electronic circuits* VBN678 Maintain vehicle body repair/making hand tools VBN679 Carry out panel beating hand skill procedures 35 VBN680 Carry out visual damage assessment 20 VBN681 Remove and replair panel VBN682 Carry out basic panel repair VBN683 Set up body alignment equipment	VBN659	Dismantle and assemble transmission, manual (conventional)	40
VBN662 Remove and replace clutch assembly VBN663 Remove and replace suspension, front springs VBN664 Remove and replace suspension, rear springs VBN665 Remove and replace brake assemblies VBN666 Remove and replace wheel and tyre assemblies 10 VBN667 Remove and replace radiator VBN692 Remove and replace steering assembly 20 VBN699 Remove and replace steering assembly 20 VBN669 Construct lighting circuits* VBN670 Remove and replace alternator* VBN671 Dismantle and assemble alternator* VBN672 Remove and replace starter motor* 15 VBN673 Dismantle and assemble starter motor* 40 VBN676 Construct basic electronic circuits* 40 VBN677 Construct microcomputer circuits* 40 VBN678 Maintain vehicle body repair/making hand tools VBN679 Carry out panel beating hand skill procedures VBN680 Carry out visual damage assessment 20 VBN681 Remove and replair panel fequipment 40 VBN683 Set up body alignment equipment 40 VBN683 Set up body alignment equipment	VBN660	Remove and replace transmission, manual (transaxle)	20
VBN663 Remove and replace suspension, front springs VBN664 Remove and replace suspension, rear springs VBN665 Remove and replace brake assemblies VBN666 Remove and replace wheel and tyre assemblies 10 VBN667 Remove and replace radiator VBN692 Remove and replace steering assembly 20 AUTOMOTIVE ELECTRICAL AND ELECTRONICS VBN669 Construct lighting circuits* VBN670 Remove and replace alternator* 15 VBN671 Dismantle and assemble alternator* 15 VBN672 Remove and replace starter motor* 15 VBN673 Dismantle and assemble starter motor* 40 VBN676 Construct basic electronic circuits* 40 VBN677 Construct microcomputer circuits* 40 VBN678 Maintain vehicle body repair/making hand tools VBN679 Carry out panel beating hand skill procedures VBN680 Carry out visual damage assessment 20 VBN681 Remove and realign body panels VBN682 Carry out basic panel repair VBN683 Set up body alignment equipment	VBN661	Dismantle and assemble transmission, manual (transaxle)	40
VBN664 Remove and replace suspension, rear springs VBN665 Remove and replace brake assemblies VBN666 Remove and replace wheel and tyre assemblies 10 VBN667 Remove and replace radiator VBN692 Remove and replace steering assembly 20 AUTOMOTIVE ELECTRICAL AND ELECTRONICS VBN669 Construct lighting circuits* VBN670 Remove and replace alternator* 15 VBN671 Dismantle and assemble alternator* 40 VBN672 Remove and replace starter motor* 15 VBN673 Dismantle and assemble starter motor* 40 VBN676 Construct basic electronic circuits* 40 VBN677 Construct microcomputer circuits* 40 VBN678 Maintain vehicle body repair/making hand tools VBN679 Carry out panel beating hand skill procedures 35 VBN680 Carry out visual damage assessment 20 VBN681 Remove and realign body panels VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment 40	VBN662	Remove and replace clutch assembly	20
VBN665 Remove and replace brake assemblies 20 VBN666 Remove and replace wheel and tyre assemblies 10 VBN667 Remove and replace radiator 20 VBN692 Remove and replace steering assembly 20 AUTOMOTIVE ELECTRICAL AND ELECTRONICS VBN669 Construct lighting circuits* 40 VBN670 Remove and replace alternator* 15 VBN671 Dismantle and assemble alternator* 40 VBN672 Remove and replace starter motor* 15 VBN673 Dismantle and assemble starter motor* 40 VBN676 Construct basic electronic circuits* 40 VBN677 Construct microcomputer circuits* 40 VBN678 Maintain vehicle body repair/making hand tools 20 VBN679 Carry out panel beating hand skill procedures 35 VBN680 Carry out visual damage assessment 20 VBN681 Remove and realign body panels 40 VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment 40	VBN663	Remove and replace suspension, front springs	25
VBN666 Remove and replace wheel and tyre assemblies 10 VBN667 Remove and replace radiator 20 VBN692 Remove and replace steering assembly 20 AUTOMOTIVE ELECTRICAL AND ELECTRONICS VBN669 Construct lighting circuits* 40 VBN670 Remove and replace alternator* 15 VBN671 Dismantle and assemble alternator* 40 VBN672 Remove and replace starter motor* 15 VBN673 Dismantle and assemble starter motor* 40 VBN676 Construct basic electronic circuits* 40 VBN677 Construct microcomputer circuits* 40 VBN678 Maintain vehicle body repair/making hand tools VBN679 Carry out panel beating hand skill procedures VBN680 Carry out visual damage assessment 20 VBN681 Remove and realign body panels 40 VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment	VBN664	Remove and replace suspension, rear springs	25
VBN667 Remove and replace radiator 20 VBN692 Remove and replace steering assembly 20 AUTOMOTIVE ELECTRICAL AND ELECTRONICS VBN669 Construct lighting circuits* 40 VBN670 Remove and replace alternator* 15 VBN671 Dismantle and assemble alternator* 40 VBN672 Remove and replace starter motor* 15 VBN673 Dismantle and assemble starter motor* 40 VBN676 Construct basic electronic circuits* 40 VBN677 Construct microcomputer circuits* 40 VBN679 Carry out panel beating hand skill procedures 35 VBN679 Carry out visual damage assessment 20 VBN680 Carry out visual damage assessment 40 VBN681 Remove and realign body panels 40 VBN683 Set up body alignment equipment 40	VBN665	Remove and replace brake assemblies	20
WBN692 Remove and replace steering assembly AUTOMOTIVE ELECTRICAL AND ELECTRONICS WBN669 Construct lighting circuits* 40 WBN670 Remove and replace alternator* 15 WBN671 Dismantle and assemble alternator* 40 WBN672 Remove and replace starter motor* 15 WBN673 Dismantle and assemble starter motor* 40 WBN674 Construct basic electronic circuits* 40 WBN675 Construct microcomputer circuits* 40 WBN677 Construct microcomputer circuits* 40 WEN678 Maintain vehicle body repair/making hand tools 20 WBN679 Carry out panel beating hand skill procedures 35 WBN680 Carry out visual damage assessment 20 WBN681 Remove and realign body panels 40 WBN683 Set up body alignment equipment 40	VBN666	Remove and replace wheel and tyre assemblies	10
AUTOMOTIVE ELECTRICAL AND ELECTRONICS VBN669 Construct lighting circuits* 40 VBN670 Remove and replace alternator* 15 VBN671 Dismantle and assemble alternator* 40 VBN672 Remove and replace starter motor* 15 VBN673 Dismantle and assemble starter motor* 40 VBN676 Construct basic electronic circuits* 40 VBN677 Construct microcomputer circuits* 40 VEHICLE BODY (PANEL BEATING) VBN678 Maintain vehicle body repair/making hand tools 20 VBN679 Carry out panel beating hand skill procedures 35 VBN680 Carry out visual damage assessment 20 VBN681 Remove and realign body panels 40 VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment 40	VBN667	Remove and replace radiator	20
VBN669 Construct lighting circuits* VBN670 Remove and replace alternator* VBN671 Dismantle and assemble alternator* VBN672 Remove and replace starter motor* VBN673 Dismantle and assemble starter motor* VBN676 Construct basic electronic circuits* VBN677 Construct microcomputer circuits* VBN678 Maintain vehicle body repair/making hand tools VBN679 Carry out panel beating hand skill procedures VBN680 Carry out visual damage assessment VBN681 Remove and realign body panels VBN682 Carry out basic panel repair VBN683 Set up body alignment equipment 40	VBN692	Remove and replace steering assembly	20
VBN670Remove and replace alternator*15VBN671Dismantle and assemble alternator*40VBN672Remove and replace starter motor*15VBN673Dismantle and assemble starter motor*40VBN676Construct basic electronic circuits*40VBN677Construct microcomputer circuits*40VEHICLE BODY (PANEL BEATING)VBN678Maintain vehicle body repair/making hand tools20VBN679Carry out panel beating hand skill procedures35VBN680Carry out visual damage assessment20VBN681Remove and realign body panels40VBN682Carry out basic panel repair40VBN683Set up body alignment equipment40	AUTOMOTIV	E ELECTRICAL AND ELECTRONICS	
VBN671 Dismantle and assemble alternator* VBN672 Remove and replace starter motor* VBN673 Dismantle and assemble starter motor* VBN676 Construct basic electronic circuits* VBN677 Construct microcomputer circuits* VBN678 Maintain vehicle body repair/making hand tools VBN679 Carry out panel beating hand skill procedures VBN680 Carry out visual damage assessment VBN681 Remove and realign body panels VBN682 Carry out basic panel repair VBN683 Set up body alignment equipment 40	VBN669	Construct lighting circuits*	40
VBN672 Remove and replace starter motor* VBN673 Dismantle and assemble starter motor* VBN676 Construct basic electronic circuits* VBN677 Construct microcomputer circuits* 40 VEHICLE BODY (PANEL BEATING) VBN678 Maintain vehicle body repair/making hand tools VBN679 Carry out panel beating hand skill procedures VBN680 Carry out visual damage assessment 20 VBN681 Remove and realign body panels VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment 40	VBN670	Remove and replace alternator*	15
VBN673 Dismantle and assemble starter motor* VBN676 Construct basic electronic circuits* VBN677 Construct microcomputer circuits* VEHICLE BODY (PANEL BEATING) VBN678 Maintain vehicle body repair/making hand tools VBN679 Carry out panel beating hand skill procedures VBN680 Carry out visual damage assessment VBN681 Remove and realign body panels VBN682 Carry out basic panel repair VBN683 Set up body alignment equipment 40	VBN671	Dismantle and assemble alternator*	40
VBN676 Construct basic electronic circuits* 40 VBN677 Construct microcomputer circuits* 40 VEHICLE BODY (PANEL BEATING) VBN678 Maintain vehicle body repair/making hand tools 20 VBN679 Carry out panel beating hand skill procedures 35 VBN680 Carry out visual damage assessment 20 VBN681 Remove and realign body panels 40 VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment 40	VBN672	Remove and replace starter motor*	15
VBN677 Construct microcomputer circuits* 40 VEHICLE BODY (PANEL BEATING) VBN678 Maintain vehicle body repair/making hand tools 20 VBN679 Carry out panel beating hand skill procedures 35 VBN680 Carry out visual damage assessment 20 VBN681 Remove and realign body panels 40 VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment 40	VBN673	Dismantle and assemble starter motor*	40
VEHICLE BODY (PANEL BEATING) VBN678 Maintain vehicle body repair/making hand tools 20 VBN679 Carry out panel beating hand skill procedures 35 VBN680 Carry out visual damage assessment 20 VBN681 Remove and realign body panels 40 VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment 40	VBN676	Construct basic electronic circuits*	40
VBN678Maintain vehicle body repair/making hand tools20VBN679Carry out panel beating hand skill procedures35VBN680Carry out visual damage assessment20VBN681Remove and realign body panels40VBN682Carry out basic panel repair40VBN683Set up body alignment equipment40	VBN677	Construct microcomputer circuits*	40
VBN679 Carry out panel beating hand skill procedures 35 VBN680 Carry out visual damage assessment 20 VBN681 Remove and realign body panels 40 VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment 40	VEHICLE BO	DY (PANEL BEATING)	
VBN680Carry out visual damage assessment20VBN681Remove and realign body panels40VBN682Carry out basic panel repair40VBN683Set up body alignment equipment40	VBN678	Maintain vehicle body repair/making hand tools	20
VBN681Remove and realign body panels40VBN682Carry out basic panel repair40VBN683Set up body alignment equipment40	VBN679	Carry out panel beating hand skill procedures	35
VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment 40	VBN680	Carry out visual damage assessment	20
VBN682 Carry out basic panel repair 40 VBN683 Set up body alignment equipment 40	VBN681		40
. , ,	VBN682		40
. , ,	VBN683		40
	VBN684	Repair a plastic component	20

Note: *VBN668 Operate electrical test equipment* is a prerequisite for electrical and electronics units of competence that have an asterisk (*). See elective bank.

VEHICLE DODY	/ /DAINITINIO\				
VEHICLE BODY	VEHICLE BODY (PAINTING)				
VBN686	Maintain and test a spray gun		20		
VBN687	Prepare surface and apply masking materials		20		
VBN688	Prepare surface and prime a repaired body panel		50		
VBN689	Apply vehicle paint to a body panel		90		
VBN690	Cut and polish a painted body panel		30		
VEHICLE BODY	(TRIMMING)				
VBN691	Carry out automotive trimming skill procedures		40		
VEHICLE BODY	(BODY MAKING)				
VBN678	Maintain vehicle body repair/making hand tools		20		
VBN693	Carry out body making skill procedures		40		
VEHICLE ENGI	NE RECONDITIONING				
VBN694	Carry out automotive machining skill procedures		40		
MAINTENANCE					
AURT270278A	Use and maintain workplace tools and equipment		20		
VBN645	Set up and use oxy acetylene equipment		30		
VBN646	Set up and use welding equipment		40		
		TOTAL	400		

SEQUENCE

While a range of delivery sequences is possible, training providers must ensure that students undertake the compulsory units of competence in the early stages of the program.

It is expected that providers will plan training schedules that integrate the delivery of batches of units of competence.

AURC270103A Apply safe working practices must be undertaken prior to structured workplace learning and should be delivered early in the program.

Schools are advised that there is no stand-alone Unit 3–4 sequence in this study. The intention of VCE VET programs is to provide students with a qualification that meets industry expectations. The foundation knowledge and skills for the ability to function effectively in the workplace are often acquired in the early stages of the training program and are necessary for the achievement of competence in other areas of the program. A student may have great difficulty in achieving competence in the specialist areas without first having undertaken training in the foundation or core units of competence. The strong advice and assumption of industry bodies is that the value of the training will be compromised unless based on the foundation skills specified by industry for each qualification.

STRUCTURED WORKPLACE LEARNING (SWL)

The VCAA has determined that SWL is an appropriate and valuable component of all VCE VET programs. SWL complements the training undertaken at the school/RTO. It provides the context for:

- enhancement of skills development
- practical application of industry knowledge
- · assessment of units of competence, as determined by the RTO
- increase of employment opportunities and marketability.

The VCAA strongly recommends that students undertake a minimum of ten days of SWL.

The school/RTO should keep evidence of the student's structured workplace learning which may take place over weekends and during school holidays as well as during the school week.

AURC270103A Apply safe working practices must be undertaken prior to SWL.

Under the new SWL arrangements outlined in Ministerial Order 23, students undertaking SWL must first complete the Occupational Health and Safety (OH&S) training relevant to the workplace before commencing their SWL placement. In the situation where assessment of OH&S units of competence is conducted in the workplace, all training up to assessment stage must be completed before the student commences SWL.

A new *Structured Workplace Learning Manual* developed by the Office of Learning and Teaching is available. Although it has been designed primarily for structured workplace learning coordinators, employers may find it a useful reference. Included in the manual is a supporting video entitled Workwise – workplace safety for students. This video highlights OH&S issues in the industry areas of hairdressing, engineering, automotive, primary industry and hospitality.

These new kits have been distributed free to schools, Local Community Partnerships, Local Learning and Employment Networks, key industry bodies and other stakeholders. The Structured Workplace Learning Manual is also accessible from the following website: www.sofweb.vic.edu.au/voced/structured_workplace_learning/swlmanual.htm

Additional copies may be ordered through the Career Education Association of Victoria (CEAV).

CEAV will charge postage and handling costs.

Tel: (03) 9349 1900 Fax: (03) 9349 3311 Email: ceav@netspace.net.au

Local community partnerships

'SWL has grown rapidly in recent years. So that industry is not overwhelmed with requests, clusters of government and non-government schools work together with business to maximise the benefits of SWL. Clusters usually operate through a 'local community partnership' which employs staff specifically to coordinate placements and monitor their quality. Local community partnerships are often incorporated bodies with a board of management with representatives from education, industry and the community. The partnerships previously funded through the Enterprise and Career Education Foundation are now funded and managed by the Australian Government Department of Education, Science and Training. There are over 200 partnerships across Australia.

The Curriculum Corporation website provides support for SWL programs including case studies: www.curriculum.edu.au'

Sourced from the Department of Education, Science and Training website: www.dest.gov.au

OCCUPATIONAL HEALTH AND SAFETY

Schools/RTOs must ensure that occupational health and safety issues are fully addressed in the training program. To assist the principal in meeting the school's responsibilities for students in SWL, delivery of training for the unit of competence *AURC270103A Apply safe working practices* must be completed before students begin their SWL.

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.

Schools must also be satisfied, through their review of the acknowledgement provided by employers in 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 toward 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 which presents potential risk. This means that no student may be exposed at any time to dangerous plant, 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.

Close supervision of students undertaking SWL is essential. Supervisors nominated by the employer must understand all requirements for safely managing the student's activities.

These websites may provide useful resources for schools/RTOs: www.worksafe.vic.gov.au/dir090/vwa/home.nsf/pages/worksafe_home www.ohs.labour.net.au/youthsafe/safety_first/index.html

* Employers should be provided with the Department of Education and Training Structured Workplace Learning Guidelines for Employers, which sets out their responsibilities and provides information to assist them with induction and supervision of students. This is available on the Sofweb website: www.sofweb.vic.edu.au

Recognition within the VCE

VCE VET UNIT ENTITLEMENT

Students undertaking the VCE VET Automotive program are eligible for credit of up to four VCE VET units on their VCE Statement of Results: two units at Unit 1–2 level and a Unit 3–4 sequence.

Students may accumulate VCE VET units over more than one year.

Schools should note that credit in this program is based on accrual of hours. To achieve a Unit 3–4 sequence for satisfactory completion purposes, a student must complete 400 hours of training including the compulsory units of competence.

DUPLICATION

VCE VET units may only make the maximum available contribution towards satisfactory completion of the VCE where no significant duplication exists between the VCE VET program and VCE studies or another VET certificate in a student's program.

Where significant duplication does exist, students may enrol in the VCE VET program and the VCE studies or other VET certificate identified, but a reduced VCE VET unit entitlement will then apply.

No significant duplication has been identified between the VCE VET Automotive program and any VCE study or VCE VET program.

Note: A student may not be enrolled simultaneously in the VCE VET Automotive program and a School Based New Apprenticeship in Automotive.

Separate assessment processes

While there is potential for the integrated delivery of elements of the VCE VET Automotive program with other VCE studies, providers must ensure that students undertake separate assessments in order to meet the VET requirements as distinct from VCE outcomes.

Where a student is enrolled in both the VCE VET Automotive program and a related VCE study, separate collections of evidence conforming to the assessment criteria in each study must be able to be demonstrated.

Importantly, assessment of the VET units of competence must be conducted to meet industry standards. The Performance Criteria, Evidence Guide and Range of Variables/Range Statement in each unit of competence specify work activities that require a suitable industry context, whether real or simulated. The assessment of competence relies on the collection of evidence that demonstrates the application of skills and knowledge to workplace tasks.

A student must not submit the same piece of work for assessment in more than one study.

EQUIVALENT NATIONAL TERTIARY ENTRANCE RANK (ENTER)

The ENTER is calculated by the Victorian Tertiary Admissions Centre (VTAC), subject to satisfactory completion of the VCE and using the study scores students have received for a specified set of VCE studies.

The contribution of the VCE VET Automotive program to the ENTER is as follows:

- Any contribution to the ENTER is subject to satisfactory completion of the Unit 3–4 sequence.
- Students who successfully complete the Unit 3–4 sequence will receive one ENTER increment.

An increment is calculated as 10 per cent of the average of the scaled scores of the student's primary four VCE studies.

For further information on the calculation of the ENTER, refer to the VTAC website: www.vtac.edu.au

Recognition within the VCAL

The Certificate II in Automotive Technology Studies is available for students who are enrolled in the VCAL.

The contribution of the Certificate II in Automotive Technology Studies to a student's VCAL program is determined by the number of units of competence completed. Each 100 hours of training will contribute one unit towards a satisfactory completion of a student's VCAL program. The Certificate II in Automotive Technology Studies will satisfy learning outcomes for the Industry Specific Skills and Work Related Skills strands.

The Certificate II in Automotive Technology Studies (either full or partial completion) may contribute to the VCAL at the Foundation, Intermediate or Senior level.

Delivery and assessment

VCE VET programs function within the AQTF, so that students may be eligible for nationally recognised qualifications or gain credit toward those qualifications.

ROLE OF REGISTERED TRAINING ORGANISATIONS

Under the AQTF, all quality assurance requirements in relation to training delivery, assessment and certification are the responsibility of RTOs. RTOs are responsible for issuing qualifications and Statements of Attainment.

The AQTF has a number of requirements of RTOs including the following:

- documented systems for quality training and assessment
- conduct of an internal audit at least annually
- documented agreements with other organisations when they provide training or assessment in partnership
- written procedures for recruitment, induction and professional development of staff, as well as induction programs
- use of trainers and assessors with specified competencies
- · explicit requirements for quality assurance in assessment.

The detailed standards for RTOs under the AQTF are available from the following website:

www.dest.gov.au

In particular, Standard 7.4 addresses the issue of suitably competent staff to deliver training:

'The RTO must ensure that training is delivered by a person who:

- i. holds the Certificate IV in Training and Assessment* from the Training and Assessment Training Package or is able to demonstrate equivalent competencies or
- ii. is under the direct supervision[†] of a person who has the competencies specified in Standard 7.4 i and
- iii. is able to demonstrate vocational competencies, at least to the level of those being delivered.
- * A person who holds the Certificate IV in Assessment and Workplace Training from the Training Package for Assessment and Workplace Training (BSZ98) will be accepted for the purposes of this standard. A person who has demonstrated equivalent competencies to the Certificate IV in Assessment and Workplace Training in the period up to 12 months following publication of the Training and Assessment Training Package will also be accepted for the purposes of this standard.
- [†] Direct supervision is achieved when a person delivering training on behalf of the RTO has regular guidance, support and direction from a person designated by the RTO who has the competencies in Standard 7.4 i and who monitors and is accountable for the training delivery. It is not necessary for the supervising person to be present during all training delivery.

(Source: AQTF Standards for Registered Training Organisations. Effective from July 1 2005)

RTOs may be TAFE institutes, private providers, group training companies, industry organisations, schools and enterprises.

Assessment may be conducted only by, or under the auspices of, an RTO. Cooperative arrangements may be established between schools and RTOs for the delivery and assessment of components of a training program. A school not registered as an RTO but intending to deliver training must do so under the auspices of an RTO.

Schools need to be assured that training providers are registered before entering an arrangement. A list of RTOs is available from Department of Education and Training regional offices, OTTE or the National Training and Information Service: www.ntis.gov.au

For further information refer to 'Registration', on page 21.

DELIVERY OPTIONS

Schools may consider two options for the delivery of VCE VET programs.

Option 1: School and RTO partnerships

School and RTO partnerships may work in the following ways:

- · shared delivery
- · delivery on behalf of the school by the RTO
- delivery by the school of the whole program, under the auspices of the RTO.

Schools can negotiate with an RTO to deliver components of the program, where the school can demonstrate access to suitable staffing and resources. The RTO may also auspice the school to gather evidence for assessment or to conduct assessment of the components delivered by the school. A school may arrange for an RTO to deliver and assess the entire program. A school in partnership with an RTO is not required to register as a training organisation, because any delivery by the school will be auspiced by the RTO.

Schools are responsible for enrolling their students with the VCAA and for entering student results on the Victorian Assessment Software System (VASS) according to VCE timelines.

Option 2: Schools as RTOs

Schools may apply to OTTE through a Training Recognition Consultant to become an RTO for the provision of specified qualifications. A summary of registration requirements and contact details for registration is provided on page 21.

Schools that register to deliver training become responsible for all elements of delivery, assessment and quality assurance, as well as the awarding of Certificates and Statements of Attainment.

A school registered as an RTO is responsible for enrolling its students with the VCAA in the relevant certificate and units of competence and for entering results on VASS when units of competence have been achieved. The school is also responsible for provision of enrolment, results and other data within the training sector.

DELIVERY IN SCHOOLS

Two modes of delivery are possible in the school context:

- 1. The delivery may be conducted through separate, timetabled classes dedicated to VET training, where there are enough students enrolled in the specific VCE VET program.
- 2. The school may timetable the delivery of training within the time allocated to one or more VCE studies which provide an appropriate delivery setting for the VET training. Students need not necessarily be enrolled in the VCE studies. This is most suited to provision for a small group of students wishing to complete a VET certificate. The school must ensure that the VET training requirements are met separately from the VCE outcomes. The assessment tasks and evidence of achievement of units of competence must be separately demonstrated and recorded.

This option may work in two ways:

- The VCE studies may offer an appropriate delivery setting for achievement of the units of competence. Some aspects of both the VCE and VET may be integrated, while others may have to be delivered through separate learning activities.
- Where there is a high degree of comparability between the VET competencies and the VCE unit outcomes, the delivery of the VET training may be integrated with the VCE study. Students must undertake separate assessments in order to meet the VET requirements and VCE outcomes. The gathering of evidence for the achievement of units of competence may occur within the school if the RTO partner is satisfied that the school has the necessary resources and expertise.

It is the responsibility of the RTO to ensure that all units of competence required for a particular VET qualification are achieved to the standard specified by the performance criteria, and are assessed according to the assessment guidelines specified in each unit of competence.

It is possible for providers to deliver the training programs in an appropriately simulated environment, as long as the contexts for assessment as described in the training package are complied with.

Note: When simulations are used for assessing competence, it is vital that they are set up to reflect real activities and conditions. Simulations must be devised, set up and operated with care, as simulations are a source of performance evidence of how the activity was carried out. The costs of setting up a valid simulation can be considerable, therefore simulations should not be considered as an inexpensive alternative.

Some elements of units of competence may be best delivered and assessed in the workplace. This may be facilitated through work placement arrangements or projects.

The following table provides advice on the VCE studies and VCE VET programs that may provide an appropriate context for delivery of some components of the VET training. Information provided is based on current practice. All such arrangements are subject to agreement with the RTO responsible for issuing the certificate. Schools may negotiate with RTOs to deliver other components of the training within VCE resources, if training and quality assurance requirements can be met. The RTO remains responsible for assessment (refer to page 16 under 'Assessment').

Unit of competence		Appropriate delivery context
VBN644	Carry out industry research	Industry and Enterprise Units 1–2
NCS003 Job seeking skills		
AURC251356A	Read in the workplace	Foundation English Units 1–2
AURC251677A	Use numbers in the workplace	Foundation Mathematics Units 1–2
BSBCMN205A Use business technology		VCE VET Business Administration Units 1–2

DELIVERY IN THE WORKPLACE

Schools and RTOs may arrange for delivery of training and assessment to occur in the workplace.

If a school or RTO wishes particular components of the training to be delivered and outcomes assessed in the workplace, the following industry requirements apply:

- Delivery and assessment strategies and relevant responsibilities should be clearly communicated
 to all parties (school, RTO, employer and student) to ensure that all roles in the delivery and
 assessment process are understood.
- There is appropriate workplace supervision and training in relation to the specific units of competence delivered in the workplace.
- The person responsible for the workplace training must have competence at the certificate level being delivered or higher.
- Assessment in the workplace requires a qualified workplace assessor with relevant industry
 experience, or the assessment may be conducted by a workplace assessor in cooperation with the
 workplace supervisor.

ASSESSMENT

Training packages have specific requirements regarding demonstration of competence and appropriate assessment of competence. These requirements are detailed in each unit of competence under the subheadings Performance Criteria, Range of Variables and Evidence Guide. Teachers should give careful consideration to the details of these sections when planning programs.

Assessment of units of competence is the responsibility of the RTO. A school that is not an RTO may be auspiced by an RTO to conduct the assessments, either in an appropriate simulated environment or in conjunction with the supervisor in the workplace.

For further information, refer to AQTF Standard 7. A copy of the Standards can be downloaded from the following website:

www.dest.gov.au

In particular, Standard 7.3 addresses the issue of suitably competent staff to conduct assessments:

- 'a. The RTO must ensure that assessments are conducted by a person who has:
 - i. the following competencies* from the Training and Assessment Training Package or is able to demonstrate equivalent competencies:
 - a. TAAASS401A Plan and organise assessment
 - b. TAAASS402A Assess competence
 - c. TAAASS404A Participate in assessment validation
 - ii. relevant vocational competencies, at least to the level being assessed.
- b. However, if a person does not have the assessment competencies as defined in Standard 7.3 a i and the vocational competencies as defined in Standard 7.3 a ii, one person with all the assessment competencies listed in Standard 7.3 a i and one or more persons who have the vocational competencies listed in Standard 7.3 a ii may work together to conduct the assessments.
- * A person who holds the competencies BSZ401A Plan assessment, BSZ402A Conduct assessment, and BSZ403A Review assessment from the Training Package for Assessment and Workplace Training will be accepted for the purposes of this standard. A person who has demonstrated equivalent competencies to BSZ401A and BSZ402A and BSZ403A in the period up to 12 months following publication of the Training and Assessment Training Package will also be accepted for the purposes of this standard.'

(Source: AQTF Standards for Registered Training Organisations. Effective from July 1 2005)

Resources

Program providers require access to the course accreditation document for 21560VIC Certificate II in Automotive Technology Studies. All delivery resources and examples should be industry-focused and relevant to current industry practice.

Other resource requirements specific to each unit of competence are listed in the Evidence Guide of the unit of competence. Refer to the accreditation document.

A Competency Achievement Record Book, specifically designed for this course has been prepared by Automotive Training Victoria. The Competency Achievement Record Book is to record a student's progress towards achievement of the qualification. Automotive Training Victoria advises that all students should use the Competency Achievement Record Book or an approved equivalent. The cost of the Competency Achievement Record Book is \$25 + GST (correct at time of publication). Contact Automotive Training Victoria for further information (page 22).

Other resources are being developed to support 21560VIC. Schools should contact Automotive Training Victoria or the Curriculum Maintenance Manager for further information. Contact details are provided on page 22.

Administration

ENROLMENTS

It is the responsibility of the student's home school to administer the VCE VET program and all aspects of VCE VET enrolment and results on VASS. A student must be enrolled in all units of competence by the home school, regardless of where the training is delivered and competence assessed.

Schools must enrol students in the VCE VET program as follows:

- 1. Enrol all students undertaking the program in 21560VIC Certificate II in Automotive Technology Studies.
- 2. Enrol students in the units of competence they are expecting to achieve in that year. If a student does not achieve a unit of competence and wishes to continue in a following year, the student must be re-enrolled in that year.
- 3. Ensure that students expecting to satisfactorily complete a Unit 3–4 sequence in that year have been enrolled in the compulsory units of competence and enough elective units of competence to satisfy the hours duration that will provide a Unit 3–4 sequence.

Schools do not need to enrol students in VCE VET units. Enrolment or withdrawal of a student from a VCE VET unit occurs automatically via enrolment in or withdrawal from the units of competence.

RECORDING RESULTS

Achievement of units of competence

To achieve a unit of competence, a student must be assessed competent for all the elements of that unit. Schools are required to record the student's achievement of all units of competence on VASS.

Results must be entered on VASS in time to meet the VCAA deadlines. Refer to the current VCE and VCAL Administrative Handbook for the due date. It is the responsibility of the home school to ensure that all results from other providers are accurate and received in time to be entered on VASS.

Schools and RTOs must ensure that records are kept of individual student achievement for all units of competence in the program.

VCE VET UNIT COMPLETION

Enrolment in units of competence automatically leads to enrolment in VCE VET units. As units of competence are recorded as completed, completion of VCE VET units is automatic.

REPORTING

VCE VET units are reported on the student's VCE or VCAL Statement of Results, together with other VCE or VCAL units completed. Students will also receive from the VCAA a separate VET Statement of Results listing all units of competence achieved.

The student receives 'S' for each unit of competence achieved. The VET Statement of Results includes only units of competence for which the student has been awarded an 'S'.

CERTIFICATION

Students who complete all the requirements of a program will be awarded a certificate by the RTO. Partial completion is recorded on a Statement of Attainment issued by the RTO.

Articulation and pathways

The Certificate II in Automotive Technology Studies is a pre-apprenticeship program designed to meet the need of students wishing to pursue a career in the automotive industry through an apprenticeship or higher education.

On completion of the Certificate II in Automotive Technology Studies students will receive credit into the following qualifications within AUR99 Automotive Industry Retail, Service and Repair Training Package:

- AUR30199 Certificate III in Automotive Electrical
- AUR30299 Certificate III in Automotive (Mechanical Automatic Transmission)
- AUR30399 Certificate III in Automotive (Mechanical Brakes)
- AUR30499 Certificate III in Automotive (Mechanical Diesel Fitter)
- AUR30699 Certificate III in Automotive (Mechanical Driveline)
- AUR30899 Certificate III in Automotive (Mechanical Heavy Vehicle Road Transport)
- AUR30999 Certificate III in Automotive (Mechanical Heavy Vehicle Mobile Equipment Plant/ Earthmoving/Agricultural)
- AUR31099 Certificate III in Automotive (Mechanical Light Vehicle)
- AUR31199 Certificate III in Automotive (Mechanical Motorcycle)
- AUR31299 Certificate III in Automotive (Mechanical Natural Gas Vehicle (NGV) installer)
- AUR32299 Certificate III in Marine (Mechanics)
- AUR32499 Certificate III in Outdoor Power Equipment (Mechanics)
- AUR30799 Certificate III in Automotive (Mechanical Engine Reconditioning)
- AUR31699 Certificate III in Automotive (Vehicle Body Panel Beating)
- AUR31899 Certificate III in Automotive (Vehicle Body Vehicle Painting)

Registration

Under the AQTF, only RTOs may issue VET qualifications.

In order to comply with these arrangements, a school offering VCE VET programs has two options: to form a partnership with an RTO, or to register through OTTE as an RTO in its own right.

Registration of training organisations in Victoria is the responsibility of the VQA. RTOs are subject to guidelines and procedures promulgated by the VQA, which are administered by OTTE.

If a school elects to become an RTO, OTTE registration requirements must be met. There are two elements to the registration requirements:

- qualification-specific information (teacher qualifications, facilities, equipment)
- infrastructure (including reporting and recording systems, codes of practice, grievance procedures, policies for Recognition of Current Competence/Prior Learning).

The application form for RTO registration and conditions of registration are available from:

VET Provider Registration Branch

Office of Training and Tertiary Education

Tel: (03) 9637 2762 Fax: (03) 9637 2520 Website: www.otte.vic.gov.au

Useful contacts and information sources

Accreditation document

Schools intending to offer the VCE VET Automotive program are required to use the accredited curriculum document for 21560VIC Certificate II in Automotive Technology Studies. The accredited curriculum document can be purchased from Automotive Training Victoria for a one-off licence fee of \$300. The curriculum document provides the details on certificate completion requirements, each unit of competence and assessment requirements. Schools may obtain the accredited curriculum document and training and assessment support materials from the following address:

Automotive Training Victoria

VACC House

PO Box 7428

MELBOURNE VIC 3004

Tel: (03) 9866 1294
Fax: (03) 9866 1295
Website: www.atv.org.au
Email: manager@atv.org.au

Curriculum Maintenance Manager - Engineering Industries - Automotive

Mr Tim Verkerk

Kangan Batman Institute of TAFE

Gwynne Street Campus

SOMERTON VIC 3062

Tel: (03) 9425 5701

Email: tverkerk@kangan.edu.au

Other sources of implementation advice

The following is a list of contacts for additional information and advice.

VCE VET program structure

Victorian Curriculum and Assessment Authority

Vocational Education - Curriculum Branch

Tel: (03) 9651 4458 Fax: (03) 9651 4324

Email: vet.vcaa@edumail.vic.gov.au Website: www.vcaa.vic.edu.au/vet

VCAL program structure

Victorian Curriculum and Assessment Authority

VCAL Unit – Curriculum Branch Tel: (03) 9651 4532 Fax: (03) 9651 4324

Email: vet.vcaa@edumail.vic.gov.au Website: www.vcaa.vic.edu.au/vet

Student enrolment

Victorian Curriculum and Assessment Authority

VASS Unit

Hotline (metro): (03) 9651 4482 Hotline (country):1800 827 721 Fax: (03) 9651 4324

Email: vass.support@edumail.vic.gov.au

VCE certification/eligibility

Victorian Curriculum and Assessment Authority

Student Records and Results Unit Hotline (metro): (03) 9651 4402 Hotline (country):1800 653 045 Fax: (03) 9651 4324

VET certification/eligibility

The RTO is responsible for certification.

Program support

Department of Education and Training Post Compulsory Pathways Branch Office of Learning and Teaching

Tel: (03) 9637 2314 Fax: (03) 9637 2160

Website: www.sofweb.vic.edu.au

Registration

Office of Training and Tertiary Education VET Provider Registration Branch

Tel: (03) 9637 2762 Fax: (03) 9637 2520 Website: www.otte.vic.gov.au

Tertiary entrance requirements

Victorian Tertiary Admissions Centre

Tel: 1300 364 133 Website: www.vtac.edu.au

Victorian Curriculum and Assessment Authority publications

The *VCAA Bulletin* (published monthly excluding January) provides administrative information and documents developments in VET in the VCE. Schools should ensure relevant information is circulated to appropriate staff and distributed to RTO partners.

VCE and VCAL Administrative Handbook (for the current year)

Also refer to VASS Help Screens for advice

Glossary

Auspice

A process whereby an RTO authorises delivery and/or assessment to be carried out by industry, individual enterprises or schools.

Australian Quality Training Framework (AQTF)

A set of nationally agreed standards ensuring the quality of vocational education and training services throughout Australia. Includes processes for registering training organisations as a quality assurance mechanism for the training system. The AQTF is the name given to the revised Australian Recognition Framework.

Australian Qualifications Framework (AQF)

The Australian Qualifications Framework is set of descriptors that determine the level of the qualification. The level depends on the depth and complexity of the work and the degree of autonomy involved.

Competency standards

Competency standards are statements which define the skills and knowledge needed for effective work performance at the standard required in the workplace. These standards have been agreed nationally by industry advisory bodies across Australia and are part of the national training packages endorsed by ANTA. The standards define the required training outcomes and outline what must be demonstrated before a candidate may be assessed competent.

Curriculum Maintenance Managers (CMMs)

The role of the CMM is to maintain the stock of Victorian Crown copyright curriculum and to provide advice on training packages. The CMMs function is carried out by staff located within TAFE institutes in Victoria. They are recognised as officers of OTTE.

Industry Skills Councils (formerly Industry Training Advisory Bodies - ITABs)

Industry Skills Councils support the development and implementation of training products, including training packages and provide the VET sector with information on current and future skill needs and training requirements.

National Training Framework

This is the system of vocational education and training that applies nationally. It is made up of the Australian Quality Training Framework and nationally endorsed training packages.

Office of Training and Tertiary Education (OTTE)

OTTE is responsible for the planning, regulation and delivery of a range of education and training programs and services in Victoria.

Registered Training Organisation (RTO)

A nationally recognised provider of training registered with the relevant State/Territory Training Authority (in Victoria through the VQA).

Training package

A set of documents that sets out the training framework determined by industry for an industry sector. National competency standards, assessment guidelines and national qualifications form the endorsed components of training packages. Assessment materials, learning strategies, and professional development materials may support these as non-endorsed components.

Unit of competence

A distinct work performance specified in terms of what should be done and the standard to which it must be performed, as required in industry. Units of competence are divided into elements, each with performance criteria and a guide to the evidence on which assessment of competence should be based.

Victorian Assessment Software System (VASS)

An Internet-based system used by schools to enter VCE and VCAL enrolments and results directly onto the VCAA central database.

VCE unit

A unit of study within the VCE, normally undertaken over one school semester and contributing towards the satisfactory completion of VCE.

VCE VET unit

A group of VET units of competence or curriculum based modules deemed to be equivalent to one VCE unit.

Vocational Education and Training (VET)

A generic term, applying both to the training sector generally and to a variety of forms of post-compulsory education and training, which focuses on the development of work-related competencies that provide pathways into employment and further training.

VET in the VCE

A set of vocational training programs approved by the VCAA, which have the support of industry bodies, and are accredited within the VCE by the VQA. This is part of the Victorian Government's post-compulsory framework and the national VET in Schools program endorsed by all states and territories.

Victorian Qualifications Authority (VQA)

The Victorian Qualifications Authority is responsible for all qualifications issued in Victoria, the registration of training providers and accreditation of all post-compulsory courses except higher education courses.

Appendix: Pre-apprenticeship descriptors

Pre-apprenticeship descriptors outline training programs that provide credit into apprenticeship qualifications within the AUR99 Automotive Industry Retail, Service and Repair Training Package.

EXAMPLE 1: AUTOMOTIVE ELECTRICIAL DESCRIPTOR

To use this descriptor the following units must be selected:

Code	Unit of competence		Nominal Hours
VBN644	Carry out industry research		40
AURC270103A	Apply safe working practices		20
NCS003	Job seeking skills		20
AURT270278A	Use and maintain electrical tools and equipment		20
VBN668	Operate electrical test equipment		40
VBN669	Construct lighting circuits		40
VBN670	Remove and replace alternator		15
VBN671	Dismantle and assemble alternator		40
VBN672	Remove and replace starter motor		15
VBN673	Dismantle and assemble starter motor		40
VBN674	Remove and refit batteries		15
VBN675	Recharge batteries		15
VBN676	Construct basic electronic circuits		40
VBN677	Construct microcomputer circuits		40
		TOTAL	400

EXAMPLE 2: AUTOMOTIVE MECHANICS DESCRIPTOR

To use this descriptor the following units must be selected:

Code	Unit of competence	Nominal Hours
VBN644	Carry out industry research	40
AURC270103A	Apply safe working practices	20
NCS003	Job seeking skills	20
AURT270278A	Use and maintain workplace tools and equipment OR	20
AURT225667A	Use and maintain measuring equipment	15
VBN648	Remove and replace engine assembly (conventional) OR	20
VBN653	Remove and replace engine cylinder head	20
VBN652	Dismantle and assemble engine, four-stroke multi cylinder petrol	40
VBN655	Dismantle and assemble carburettor	20
VBN657	Dismantle and assemble fuel pump	20
VBN661	Dismantle and assemble transmission, manual (transaxle) OR	40
VBN659	Dismantle and assemble transmission, manual (conventional)	40
VBN662	Remove and replace clutch assembly	20
VBN692	Remove and replace steering assembly	20
VBN665	Remove and replace brake assemblies OR	20
VBN663	Remove and replace suspension, front springs	25
VBN666	Remove and replace wheel and tyre assemblies	10
VBN675	Recharge batteries	15
VBN668	Operate electrical test equipment	40
VBN676	Construct basic electronic circuits OR	40
VBN677	Construct microcomputer circuits	40
	TOTAL	400-410

EXAMPLE 3: AUTOMOTIVE ENGINE RECONDITIONING DESCRIPTOR

To use this descriptor the following units must be selected:

Code	Unit of competence	Nominal Hours
VBN644	Carry out industry research	40
AURC270103A	Apply safe working practices	20
NCS003	Job seeking skills	20
AURT225667A	Use and maintain measuring equipment	15
VBN645	Set up and use oxy acetylene equipment	30
VBN646	Set up and use welding equipment	40
VBN694	Carry out automotive machining skill procedures	40
VBN648	Remove and replace engine assembly (conventional) OR	20
VBN649	Remove and replace engine and transaxle assembly (FWD)	20
VBN650	Dismantle and assemble engine, two stroke single cylinder petrol OR	40
VBN651	Dismantle and assemble engine, four-stroke single cylinder petrol	40
VBN652	Dismantle and assemble engine, four-stroke, multi cylinder petrol	40
VBN674	Remove and refit batteries OR	15
VBN675	Recharge batteries	15
VBN668	Operate electrical test equipment	40
VBN676	Construct basic electronic circuits OR	40
VBN677	Construct microcomputer circuits	40
	TOTAL	400

EXAMPLE 4: AUTOMOTIVE PANEL BEATING DESCRIPTOR

To use this descriptor the following units must be selected:

Code	Unit of competence		Nominal Hours
VBN644	Carry out industry research		40
AURC270103A	Apply safe working practices		20
NCS003	Job seeking skills		20
BSBCMN205A	Use business technology OR		30
VBN679	Carry out panel beating hand skill procedures		35
AURT225667A	Use and maintain measuring equipment		15
VBN645	Set up and use oxy acetylene equipment		30
VBN646	Set up and use welding equipment		40
VBN678	Maintain and use vehicle body repair/making hand tools		20
VBN680	Carry out visual damage assessment		20
VBN681	Remove and realign body panels		40
VBN682	Carry out basic panel repair		40
VBN683	Set up body alignment equipment		40
VBN684	Repair a plastic component		20
VBN685	Apply sealants		10
VBN674	Remove and refit batteries		15
		TOTAL	400-405

EXAMPLE 5: AUTOMOTIVE VEHICLE PAINTING DESCRIPTOR

To use this descriptor the following units must be selected:

Code	Unit of competence		Nominal Hours
VBN644	Carry out industry research		40
AURC270103A	Apply safe working practices		20
NCS003	Job seeking skills		20
BSBCMN205A	Use business technology		30
AURT225667A	Use and maintain measuring equipment		15
VBN647	Clean a vehicle		20
VBN686	Maintain and test a spray gun		20
VBN687	Prepare surface and apply masking materials		20
VBN688	Prepare surface and prime a repaired body panel		50
VBN689	Apply vehicle paint to a body panel		90
VBN690	Cut and polish a painted body panel		30
VBN680	Carry out visual damage assessment		20
VBN685	Apply sealants		10
VBN674	Remove and refit batteries		15
		TOTAL	400

EXAMPLE 6: COMBINED AUTOMOTIVE PANEL BEATING & VEHICLE PAINTING DESCRIPTOR

To use this descriptor the following units must be selected:

Code	Unit of competence		Nominal Hours
VBN644	Carry out industry research		40
AURC270103A	Apply safe working practices		20
NCS003	Job seeking skills		20
BSBCMN205A	Use business technology		30
VBN680	Carry out visual damage assessment		20
VBN646	Set up and use welding equipment		40
VBN681	Remove and realign body panels		40
VBN682	Carry out basic panel repair		40
VBN685	Apply sealants		10
VBN688	Prepare surface and prime a repaired body panel		50
VBN689	Apply vehicle paint to a body panel		90
		TOTAL	400