	3.3 Observation
4. Context of Assessment	4.1 Competency may be assessed individually in the actual workplace or through a simulated work place environment
5. Guidance information for assessment	5.1 Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

DEVELOP COMPUTER PROGRAM

UNIT CODE: IT/OS/ICT/CR/5/5

UNIT DESCRIPTION

This unit covers the competencies required to develop computer program

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA *(Bold and italicised terms are elaborated in the Range)*
1. Identify Programming concepts and approaches	1.1 Identification of program and programming is done 1.2 *Language translators* are identified 1.3 Description of *programming approaches* is done
2. Identify program development methodologies	2.1 Description of program specifications is done 2.2 Application of program development cycle is done 2.3 Types of development methodologies are identified 2.4 *Styles of programming* are identified
3. Identify Program design	3.1 Description of Program design is done 3.2 *Program design approaches* are identified 3.3 *Program design tools* are identified
4. Identify computer programming languages	4.1 Generations of programming languages are Identified 4.2 Factors for choosing a programming language are determined 4.3 Basic tools for program development are identified
5. Perform Basic structured Programming using C language	5.1 Fundamentals of C programming are identified 5.2 *Control structures* in C programming are identified 5.3 Sub programs of C language are explained 5.4 *C language concepts* are identified 5.5 C programming environment is identified 5.6 Description of sub programming 5.7 C program format is explained
6. Perform Basic Internet programming	6.1 Internet based programming concepts are identified 6.2 Web programming approaches are identified 6.3 *Web programming languages* are identified 6.4 *Web programming interfaces* are identified 6.5 HTML coding is done

RANGE

Variable	Range
	May include but is not limited to:
1. Language translators	1.1 Linkers 1.2 Loader 1.3 Interpreters 1.4 Compilers 1.5 Editors
2. Programming approaches	2.1 Procedural 2.2 Event driven 2.3 Object oriented 2.4 Internet based
3. Program design tools	3.1 Flow charts 3.2 Pseudo codes 3.3 Decision trees and tables
4. Styles of programming	4.1 Functional 4.2 Modular 4.3 Visual
5. Control structures	5.1 Sequence 5.2 Selection 5.3 Iteration
6. Web programming languages	6.1 Html 6.2 Php 6.3 JavaScript
7. Web programming Interfaces	7.1 Common client Interface(CCI) 7.2 Common Gateway Interface (CGI)

REQUIRED KNOWLEDGE AND UNDERSTANDING

The individual needs to demonstrate knowledge and understanding of:

1.1	• Programming Generations • Program development cycle • Program Design and Approach • Program design tools • Application of C language techniques • Program Documentation

	• Developing a Simple program

FOUNDATION SKILLS

The individual needs to demonstrate the following foundation skills:
• Communications (verbal and written); • Proficient in ICT; • Time management; • Analytical • Faults troubleshooting; • Problem solving; • Planning; • Decision making; • First aid; • Report writing;

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and understanding and range.

1. Critical Aspects of Competency	**Assessment requires evidence that the candidate:** 1 .1Identified Language translators and programming approaches 1 .2Identified program development cycle and styles of programming. 1 .3Identified Program design approaches and program design tools. 1 .4Identified generations of programming languages. 1 .5Identified factors for choosing programming language. 1 .6Identified basic tools for program development 1 .7Demonstrate language program format 1 .8Demonstrate control structures usage in a program. 1 .9Develop a basic program
2. Resource Implications	***The following resources must be provided:*** Resources the same as that of workplace are advised to be applied Computers, software etc
3. Methods of Assessment	**Competency may be assessed through:** 3.1 Oral test 3.2 Observation

		3.3 Practical demonstration
4.	Context of Assessment	Competency may be assessed individually in the actual workplace or through a simulated work place setting
5.	Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

MANAGE OPERATING SYSTEM

UNIT CODE: IT/OS/ICT/CR/6/5

UNIT DESCRIPTION

This unit covers the competencies required to select, install and usage of manage operating system