



## **Stage 6 Syllabus**

# **INFORMATION TECHNOLOGY**

## **Curriculum Framework**

### **Part B**

## **Units of Competency and HSC Requirements**

**for implementation from 2010**

**Information Technology (120 indicative hours)**

**Information Technology (240 indicative hours)**

**2009**

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## The Information Technology Curriculum Framework

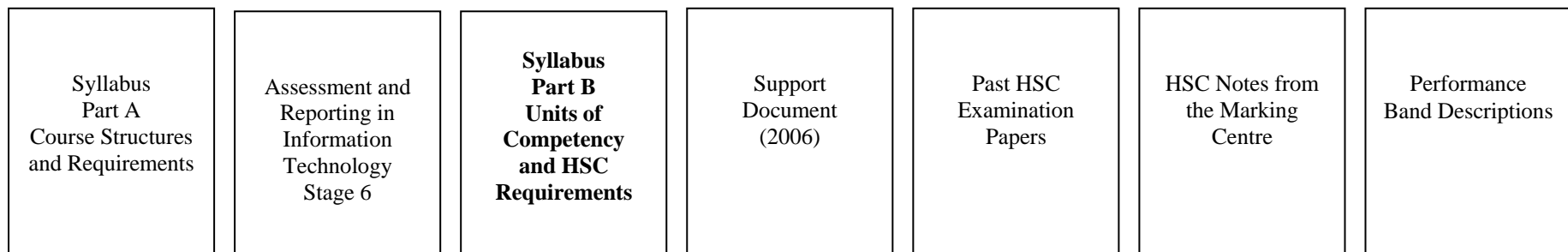
The Information Technology Curriculum Framework has been developed to provide students with the opportunity to gain credit towards the NSW Higher School Certificate and credit towards national vocational qualifications in the Information and Communications Technology industry under the Australian Qualifications Framework. The Framework is based on the national *Information and Communications Technology Training Package (ICA05)*.

This Industry Curriculum Framework incorporates all Higher School Certificate Information Technology VET courses including:

- courses delivered by schools
- courses delivered by TAFE colleges
- courses delivered by other Registered Training Organisations on behalf of schools or TAFE colleges.

This document, Part B of the *Information Technology Curriculum Framework Stage 6 Syllabus*, contains the text of the compulsory units of competency drawn from the Information and Communications Technology Training Package (ICA05). Each examinable unit of competency is accompanied by HSC requirements and advice. The HSC requirements and advice column indicates the depth of study required for purposes of the HSC. The terms, concepts and content contained in this column must be included in programming and delivery for the HSC.

### Information Technology Curriculum Framework Documentation



## Information Technology Curriculum Framework – Units of Competency Contained in Part B

This document contains the following compulsory units of competency together with HSC requirements and advice for each examinable unit. The HSC requirements and advice column indicates the depth of study required for purposes of the HSC. The terms, concepts and content contained in this column must be included in programming and delivery for the HSC.

Unit code	Unit title	HSC indicative hours of credit	Page numbers
<b><i>Compulsory units of competency – examinable</i></b>			
ICAD3218B	Create user documentation	20	9-17
ICAI3020B	Install and optimise operating system software	20	18-26
ICAS3031B	Provide advice to clients	30	27-37
ICAS3234B	Care for computer hardware	20	38-46
ICAT3025B	Run standard diagnostic tests	10	47-52
ICAU2231B	Use computer operating system	15	53-60
ICAU3004B	Apply occupational health and safety procedures	20	61-73
ICAW2001B	Work effectively in an IT environment	20	74-82
<b><i>Compulsory units of competency – other</i></b>			
ICAU1128B	Operate a personal computer	5	83-87
<b><i>Elective units of competency</i></b>			
All other units of competency from the Information Technology Curriculum Framework are available from the <i>Information and Communications Technology Training Package (ICA05)</i> at <a href="http://www.ntis.gov.au">www.ntis.gov.au</a> .			

## Examinable outcomes and content

The HSC examination in Information Technology is based on a set of examinable units of competency from the Information Technology (240 indicative hours) course and the associated employability skills for Certificate II in Information Technology (refer to Section 15 of Part A of the Syllabus).

The HSC examination is based on the following components of each examinable unit of competency:

- elements of competency
- performance criteria
- range statement\*
- required skills and knowledge
- evidence guide, including:
  - critical aspects for assessment and evidence required to demonstrate competency in this unit
  - context of and specific resources for assessment
  - methods of assessment
- minimum prescribed learning contained in HSC requirements and advice, described as:
  - key terms and concepts, and
  - learning experiences that must be addressed for the HSC.

\* The range statement frequently uses the term 'may include'. This has been clarified in the *HSC Requirements and Advice* column to specify the learning experiences that must be included for the examinable units of competency. Only the learning that is compulsory according to the Training Package and/or *HSC Requirements and Advice* can be examined.

The following **Key to Units** explains the purpose of each part of the layout of the units.

<b>Training Package</b>	Information and Communications Technology (ICA05)		<b>Indicates the Training Package to which the unit belongs.</b>	<b>HSC Requirements and Advice</b>
<b>Title</b>	<b>Create user documentation</b>			
<b>Unit code</b>	<b>Unit sector</b>	<b>The sector of the industry to which the unit of competency mainly applies.</b>	<b>HSC Indicative Hours</b>	
<b>ICAD3218B</b>	Documentation		<b>20</b>	
<b>Unit descriptor</b>	This unit defines the competency required to create user documentation that is clear to the target audience and is easy to navigate. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.			<b>Hours recognised for HSC unit credit.</b>
<b>Prerequisite units</b>	There are no prerequisites for this unit.			
<b>Employability skills</b>	This unit contains employability skills.			

<b>Required skills and knowledge</b> This section describes the skills and knowledge required for this unit.		<b>HSC Requirements and Advice</b>
<b>Required skills</b>	<b>Required knowledge</b>	<b>Key Terms and Concepts</b>
<ul style="list-style-type: none"> <li>Selecting and using appropriate software and tools</li> <li>Identifying target audiences</li> <li>Analysing audience needs</li> <li>Identifying relevant content</li> <li>Determining appropriate content, format and media</li> <li>Writing content.</li> </ul>	<ul style="list-style-type: none"> <li>Content features, such as clarity and readability</li> <li>Instructional design principles</li> </ul>	<ul style="list-style-type: none"> <li>documentation requirements</li> <li>principles of instructional, document and web design</li> <li>target audience</li> <li>tracking processes</li> <li>types of user documentation</li> </ul>

**This section describes the skills and knowledge required for the unit. Knowledge identifies what a person needs to know to perform the work in an informed and effective manner. Skills describe the application of knowledge to situations where understanding is converted into a workplace outcome.**

**Key terms and concepts to be addressed when undertaking this unit of competency for the purpose of the HSC.**

**Employability Skills are essential features of each of the qualifications available in the Framework and therefore consideration must be given to the ways in which they can be addressed when designing learning activities and assessment instruments**

**The evidence guide is critical in assessment as it provides information to the RTO and assessor about how the unit of competency may be demonstrated.**

### Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	Context of and specific resources for assessment	Method of assessment	Guidance information for assessment
<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> <li>assessment must confirm the ability to create user documentation that meets business requirements, caters for a diverse readership, is clear to the target audience and easy to navigate.</li> </ul> <p><b>Describes how consistency in performance can be assessed over time, in various contexts and with a range of evidence, and expectations at the relevant AQF qualification level.</b></p>	<p>The breadth, depth and complexity of knowledge and skills in this competency would cover selecting, adapting and transferring skills and knowledge to new environments and providing technical advice and some leadership in resolution of specified problems. This would be applied across a range of roles in a variety of contexts with some complexity in the extent and choice of options available.</p> <p>Assessment must ensure:</p> <ul style="list-style-type: none"> <li>performance of a defined range of skilled operations, usually within a range of broader related activities involving known routines, methods and procedures, where some discretion and judgement is required in the selection of equipment, services or contingency measures and within known</li> </ul> <p><b>Provides a summary of conditions under which competency must be assessed including the context and application for assessment.</b></p>	<p>The purpose of this unit is to define the standard of performance to be achieved in the workplace. In undertaking training and assessment activities related to this unit, consideration should be given to the implementation of appropriate diversity and accessibility practices in order to accommodate people who may have special needs. Additional guidance on these and</p> <p><b>Provides a summary of conditions under which competency must be assessed including variables such as methods of assessment and assessment environments.</b></p> <p>Assessment must closely reflect the workplace to enable full demonstration of competency.</p> <ul style="list-style-type: none"> <li>Assessment will usually include observation of real or simulated work processes and procedures and/or performance in a project context as well as questioning on underpinning knowledge and skills. The questioning of team members, supervisors, subordinates, peers and clients where appropriate may provide valuable input to the assessment process. The interdependence of units for assessment purposes may vary with the particular project or scenario.</li> </ul>	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.</p> <p>An individual demonstrating this competency would be able to:</p> <ul style="list-style-type: none"> <li>demonstrate some relevant theoretical knowledge</li> <li>apply a range of well-developed skills</li> <li>apply known solutions to a variety of predictable problems</li> <li>perform processes that require a range of well-developed skills where some discretion and judgement is required</li> <li>interpret available information, using discretion and judgement</li> <li>take responsibility for own outputs in work and learning</li> <li>take limited responsibility for the output of others</li> </ul> <p><b>Indicates potential relationships with assessment of other units of competency and the types of skills and knowledge a student should be able to demonstrate.</b></p>
<p><b>Indicates the industry curriculum framework to which the unit of competency belongs.</b></p>	<p><b>Date of release for the HSC.</b></p>		

Elements	Performance criteria	Range Statement	HSC requirements and advice
<p>1 Determine documentation standards and requirements.</p>	<p>1.1 Determine <i>documentation</i> requirements.</p>	<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. <b><i>Bold italicised</i></b> wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p> <p><b><i>Documentation</i></b> may include but are not limited to:</p> <ul style="list-style-type: none"> <li>• user manuals and procedure manuals</li> <li>• training materials in either hard copy</li> <li>• electronic copy</li> <li>• on-line help</li> <li>• internet/intranet</li> <li>• design specifications.</li> </ul>	<p><b>Learning experiences for the HSC must address:</b></p> <p><i>NB Students are required to produce both paper-based and online user documentation.</i></p> <p>An understanding of the difference between:</p> <ul style="list-style-type: none"> <li>• user documentation</li> <li>• technical documentation.</li> </ul> <p>An awareness of the broad purpose of user</p> <p><b>Indicates the depth of study required for purposes of the HSC for the corresponding performance criteria and essential knowledge and skills outlined in the evidence guide.</b></p> <ul style="list-style-type: none"> <li>• internal (for in-house use, used by the same company/organisation that develops it)</li> <li>• external (for outside use, for users outside the company/organisation that develops it).</li> </ul> <p>Identifying the needs of the target audience and analysing their needs in order to:</p> <ul style="list-style-type: none"> <li>• determine documentation requirements</li> <li>• produce effective user documentation.</li> </ul> <p>Characteristics of effective user documentation including:</p> <ul style="list-style-type: none"> <li>• takes into consideration the differences between target audience (users) <ul style="list-style-type: none"> <li>- personalities</li> <li>- experience</li> <li>- cultural background</li> <li>- attitudes and values</li> <li>- language</li> <li>- environment</li> </ul> </li> </ul>

**Elements of competency are the basic building blocks of the unit. They describe, in terms of outcome, the significant functions and tasks that a person in a particular area of work is able to perform.**

**The performance criteria indicate the level of performance that is required for each element. These are used as the tools for assessment.**

**The range statement describes contextual variables that may be used or encountered when applying the competency in work situations.**