

<b>Training Package</b>	Information and Communications Technology (ICA05)		<b>HSC Requirements and Advice</b>
<b>Title</b>	<b>Work effectively in an IT environment</b>		
<b>Unit code</b>	<b>Unit sector</b>	<b>HSC Indicative Hours</b> <b>20</b>	
<b>ICAW2001B</b>	Team Work		
<b>Unit descriptor</b>	<p>This unit defines the competency required to work effectively within the IT environment of an organisation by researching and assembling information about the organisation's IT systems, equipment, software, policies and governance arrangements.</p> <p>The following unit is linked and forms an appropriate cluster:</p> <ul style="list-style-type: none"> <li>• ICAW2002B Communicate in the workplace.</li> </ul> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>		
<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>		<b>HSC Requirements and Advice</b>
This section describes the skills and knowledge required for this unit.		
<b>Required skills</b>	<b>Required knowledge</b>	<b>Key Terms and Concepts</b>
<ul style="list-style-type: none"> <li>• Reading and writing at a level where workplace documents can be written and understood</li> <li>• Verbal communication which is clear and precise (e.g. when explaining the role of key players in the IT organisation)</li> <li>• Problem solving is limited to basic known problems within normal routines (e.g. when complying with policies and procedures as directed by supervisor)</li> <li>• Basic analysis skills in relation to normal routine work processes (e.g. when complying with policies and procedures as directed by supervisor)</li> <li>• Using the features of applications (e.g. when complying with policies and procedures as directed by supervisor)</li> <li>• Basic skills in interpreting technical information (e.g. when complying with policies and procedures as directed by supervisor).</li> </ul>	<ul style="list-style-type: none"> <li>• Basic principles of EEO and anti-discrimination to ensure consistency with the organisational values and community best practice</li> <li>• Broad knowledge of organisational code of conduct and values that are consistent with the organisational mission</li> <li>• Basic understanding of organisational systems and the management structure</li> <li>• Understanding of the role and positioning of IT within the overall business objectives of the organisation</li> <li>• Current industry-accepted hardware and software products, with broad knowledge of features and capabilities</li> <li>• Broad knowledge of vendor product directions.</li> </ul>	<ul style="list-style-type: none"> <li>• awards, agreements and contracts</li> <li>• career opportunities and pathways</li> <li>• current industry practices</li> <li>• emerging technologies</li> <li>• interrelationship between ICT industry and other industries</li> <li>• knowledge of an organisation in relation to its ICT capacity, assets, services and staff</li> <li>• personal attributes</li> <li>• workplace policies and procedures.</li> </ul>

## Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for this 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 effectively integrate into and operate in the IT environment of an organisation. An individual would be expected to demonstrate an understanding of the organisation's IT policies, systems, management structure and operating arrangements.</li> </ul> <p>To demonstrate competency in this unit the learner will require access to:</p> <ul style="list-style-type: none"> <li>a workstation</li> </ul>	<p>Information systems areas within organisations play an increasingly important role in helping the business achieve its core objectives. When joining and working within an organisation in an IT capacity, it is important to understand the role of IT and the type and extent of IT assets managed by the IT area and staff.</p> <p>The breadth, depth and complexity of knowledge and skills in this competency would prepare a person to perform in a range of varied activities or knowledge applications where there is a clearly defined range of contexts in which the choice of actions required is usually clear. There would generally be limited complexity in the range of operations to be applied.</p> <p>Assessment must ensure:</p> <ul style="list-style-type: none"> <li>performance of a prescribed range of functions involving known routines and procedures and some accountability for the quality of outcomes would be characteristic</li> <li>applications may include some complex or non-routine activities involving individual responsibility or autonomy and/or collaboration with others as part of a group or team.</li> </ul>	<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 related matters is provided in ICA05 Section 1.</p> <ul style="list-style-type: none"> <li>Competency in this unit should be assessed using summative assessment to ensure consistency of performance in a range of contexts. This unit can be assessed either in the workplace or in a simulated environment. However, simulated activities must closely reflect the workplace to enable full demonstration of competency.</li> <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, for example:</p> <ul style="list-style-type: none"> <li>ICAW2002B Communicate in the workplace</li> </ul> <p>An individual demonstrating this competency would be able to:</p> <ul style="list-style-type: none"> <li>demonstrate basic operational knowledge in a moderate range of areas</li> <li>apply a defined range of skills</li> <li>apply known solutions to a limited range of predictable problems</li> <li>perform a range of tasks where choice between a limited range of options is required</li> <li>assess and record information from varied sources</li> <li>take limited responsibility for own outputs in work and learning</li> <li>maintain knowledge of industry products and services.</li> </ul>

Elements	Performance criteria	Range Statement	HSC requirements and advice
<p>1 Identify IT in an organisation and related relevant policies and procedures.</p>	<p>1.1 Identify IT roles in an organisation and briefly describe what services they perform.</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>Learning experiences for the HSC must address:</b></p> <p>NB This unit of competency requires students to research the underpinning knowledge in relation to the information and communications technology (ICT) environment of at least one organisation. Students are required to work effectively within the particular ICT environment.</p> <p><i>Ideally, this investigation could be undertaken during work placement with students reporting their findings and experience to the class on their return. This will ensure students are made aware of a range of ICT environments and the differences in workplace practices between organisations.</i></p> <p>Skills for:</p> <ul style="list-style-type: none"> <li>• basic research <ul style="list-style-type: none"> <li>- identification of relevant information</li> <li>- questioning techniques to obtain information</li> <li>- sorting, summarising and presenting information</li> </ul> </li> <li>• reading and writing at a level where workplace documents can be written and understood</li> <li>• clear and precise verbal communication.</li> </ul> <p>An awareness of sources for current industry information including:</p> <ul style="list-style-type: none"> <li>• industry associations and organisations</li> <li>• unions/staff associations</li> <li>• industry journals</li> <li>• the internet</li> <li>• libraries</li> <li>• reference manuals</li> <li>• policy and procedure manuals</li> <li>• personal observations and experience</li> <li>• industry contacts, mentors and advisors</li> <li>• colleagues, supervisors/team leaders and managers</li> <li>• professional development opportunities</li> <li>• industry functions.</li> </ul>

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			<p>An awareness of the following in relation to the ICT industry:</p> <ul style="list-style-type: none"> <li>• statistics <ul style="list-style-type: none"> <li>- employment</li> <li>- income</li> </ul> </li> <li>• current trends</li> <li>• interrelationship with other industries.</li> </ul> <p>Knowledge of service areas (non-trade area where ICT personnel work and provide a service/response, for example call centre, helpdesk, desktop publishing, e-business and website development/maintenance) within an ICT context including:</p> <ul style="list-style-type: none"> <li>• the role and service(s) offered by each area</li> <li>• interrelationship between service areas.</li> </ul> <p>An awareness of vocational specialisations in an ICT environment including:</p> <ul style="list-style-type: none"> <li>• support</li> <li>• website development</li> <li>• networking</li> <li>• programming</li> <li>• testing</li> <li>• systems analysis and design</li> <li>• multimedia</li> <li>• project management</li> <li>• systems administration</li> <li>• database design and development</li> <li>• network security.</li> </ul>
	<p>1.2 Identify and describe <i>key players</i> from the IT service areas previously identified.</p>	<p><i>Key players</i> may include but are not limited to:</p> <ul style="list-style-type: none"> <li>• IT organisations</li> <li>• vendors of IT products and services</li> <li>• IT professional bodies</li> <li>• industry publications and government departments involved in IT industry promotion</li> <li>• employer organisations</li> <li>• relevant unions.</li> </ul>	<p><b>Learning experiences for the HSC must address:</b></p> <p>An awareness of the two broad categories for the ICT workforce:</p> <ul style="list-style-type: none"> <li>• ICT specialist</li> <li>• ICT user.</li> </ul> <p>An awareness of career opportunities and pathways within the ICT industry, as well as other industries where ICT services are required/provided.</p>

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			<p>A basic understanding of the primary role(s) and duties/services performed of a range of ICT personnel including:</p> <ul style="list-style-type: none"> <li>• help desk operator</li> <li>• network administrator</li> <li>• hardware technician</li> <li>• web designer</li> <li>• software developer</li> <li>• programmer</li> <li>• desktop publisher</li> <li>• ICT manager</li> <li>• ICT trainer.</li> </ul> <p>A definition of:</p> <ul style="list-style-type: none"> <li>• outsourcing.</li> </ul> <p>An awareness of the possible need for ‘outsourcing’ to fulfil the ICT requirements of the organisation.</p> <p>A basic knowledge of industry employment conditions including:</p> <ul style="list-style-type: none"> <li>• industrial award</li> <li>• enterprise agreement</li> <li>• workplace agreement</li> <li>• contract.</li> </ul> <p>Personal attributes and work ethics of ICT workers including:</p> <ul style="list-style-type: none"> <li>• attendance and punctuality</li> <li>• ethical behaviour</li> <li>• honesty</li> <li>• work performance</li> <li>• taking directives</li> <li>• attention to detail</li> <li>• personal presentation and grooming</li> <li>• attitude</li> <li>• confidentiality</li> <li>• consistency of service</li> <li>• safe work practices.</li> </ul> <p>An awareness of current industrial relations issues affecting the industry.</p> <p>Forms of bullying and harassment in the workplace including:</p>

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			<ul style="list-style-type: none"> <li>• sexual</li> <li>• verbal</li> <li>• physical</li> <li>• psychological.</li> </ul> <p>A basic understanding of the principles of equal employment opportunity (EEO) legislation:</p> <ul style="list-style-type: none"> <li>• <i>Equal Employment Opportunity (Commonwealth Authorities) Act 1987 (Cth)</i></li> <li>• <i>Equal Opportunity for Women in the Workplace Act 1999 (Cth)</i>.</li> </ul> <p>A basic understanding of the principles of anti-discrimination legislation:</p> <ul style="list-style-type: none"> <li>• <i>Anti-Discrimination Act 1977 (NSW)</i></li> <li>• <i>Sex Discrimination Act 1984 (Cth)</i></li> <li>• <i>Racial Discrimination Act 1975 (Cth)</i></li> <li>• <i>Disability Discrimination Act 1992 (Cth)</i></li> <li>• <i>Age Discrimination Act 2004 (Cth)</i>.</li> </ul> <p>Reciprocal rights and responsibilities of employers and employees in relation to EEO and anti-discrimination.</p> <p>An awareness of:</p> <ul style="list-style-type: none"> <li>• workplace policies and procedures designed to prevent discrimination and harassment in the workplace</li> <li>• legal ramifications of inappropriate workplace conduct</li> <li>• recourse in the event of inappropriate conduct <ul style="list-style-type: none"> <li>- reporting complaints</li> <li>- grievance procedures</li> <li>- disciplinary action.</li> </ul> </li> </ul> <p>Points to consider when completing work tasks including:</p> <ul style="list-style-type: none"> <li>• adherence to safety procedures</li> <li>• following directions from supervisor</li> <li>• maintaining personal presentation standards</li> <li>• adherence to workplace policies</li> <li>• maintaining personal work space</li> <li>• contributing to productive work environment by accepting responsibility for own work and assisting co-workers as required</li> </ul>

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			<ul style="list-style-type: none"> <li>• checking required materials and equipment are available and meet requirements of the task</li> <li>• seeking advice/obtain information as required from               <ul style="list-style-type: none"> <li>- co-workers and supervisor/team leader</li> <li>- trade personnel</li> <li>- contractors</li> <li>- suppliers</li> <li>- industry/regulatory bodies.</li> </ul> </li> </ul> <p>A basic understanding of the primary role/function of key ICT industry bodies including:</p> <ul style="list-style-type: none"> <li>• industry stakeholders/associations               <ul style="list-style-type: none"> <li>- NSW Communications ITAB</li> <li>- Innovation and Business Skills Australia (IBSA)</li> <li>- Australian Computer Society (ACS)</li> <li>- Australian Information Industry Association (AIIA)</li> <li>- CompTIA</li> <li>- Australian Telecommunications User Group (ATUG)</li> </ul> </li> <li>• current vendors</li> <li>• government bodies               <ul style="list-style-type: none"> <li>- Department of Commerce, Information Technology and the Arts (DCITA)</li> </ul> </li> <li>• unions/staff associations               <ul style="list-style-type: none"> <li>- Australian Services Union (ASU)</li> <li>- Australian Workers Union (AWU)</li> </ul> </li> <li>• other lobbyists/interest groups               <ul style="list-style-type: none"> <li>- software association</li> <li>- internet association</li> <li>- service providers association</li> </ul> </li> <li>• users group.</li> </ul>
	1.3 Identify IT policies and procedures and research whether they are used in practice.		<p><b>Learning experiences for the HSC must address:</b></p> <p>A broad knowledge of an organisation in relation to its ICT capacity and the type and extent of ICT assets managed by the ICT area/staff including:</p> <ul style="list-style-type: none"> <li>• systems</li> <li>• equipment</li> <li>• software</li> </ul>

Elements	Performance criteria	Range Statement	HSC requirements and advice
			<ul style="list-style-type: none"> <li>• employees</li> <li>• policies</li> <li>• procedures</li> <li>• governance arrangements               <ul style="list-style-type: none"> <li>- mission statement, values and business</li> <li>- objectives</li> <li>- code of conduct</li> <li>- management structure and lines of reporting.</li> </ul> </li> </ul> <p>Policies and procedures for management of ICT in an organisation including:</p> <ul style="list-style-type: none"> <li>• acceptable use</li> <li>• internet and access to websites</li> <li>• sending emails</li> <li>• confidentiality</li> <li>• privacy</li> <li>• security</li> <li>• copyright</li> <li>• protection against computer viruses</li> <li>• equipment and consumables               <ul style="list-style-type: none"> <li>- asset management</li> <li>- usage</li> </ul> </li> <li>• software licensing.</li> </ul> <p>An awareness of current industry practice(s) used to:</p> <ul style="list-style-type: none"> <li>• implement policies and procedures</li> <li>• monitor compliance of policies and procedures.</li> </ul>
<p>2 Identify IT equipment, software and operating systems used by the organisation.</p>	<p>2.1 Identify IT <i>equipment, operating systems</i> and <i>software</i> used in the organisation and understand the importance and role within the organisation.</p>	<p><i>Equipment</i> may include but is not limited to:</p> <ul style="list-style-type: none"> <li>• workstations</li> <li>• personal computers</li> <li>• modems and other connectivity devices</li> <li>• printers</li> <li>• DSL modems</li> <li>• hard drives</li> <li>• monitors</li> <li>• switches</li> <li>• hubs</li> <li>• personal digital assistant (PDA)</li> <li>• other peripheral devices.</li> </ul> <p><i>Operating system</i> may include but is not limited to:</p>	<p><b>Learning experiences for the HSC must address:</b></p> <p>A broad knowledge of a range of current industry-accepted:</p> <ul style="list-style-type: none"> <li>• hardware           <ul style="list-style-type: none"> <li>- workstation</li> <li>- computer               <ul style="list-style-type: none"> <li>▪ personal and/or networked</li> </ul> </li> <li>- connectivity devices               <ul style="list-style-type: none"> <li>▪ modem</li> <li>▪ digital subscriber line (DSL) modem</li> <li>▪ switch</li> <li>▪ hub</li> <li>▪ wireless access points</li> </ul> </li> <li>- peripheral devices</li> </ul> </li> </ul>

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		<ul style="list-style-type: none"> <li>• Linux 7.0 or above</li> <li>• Windows 2000 or above</li> <li>• Apple.OS X or above</li> </ul> <p><i>Software</i> may include but is not limited to:</p> <ul style="list-style-type: none"> <li>• commercial software applications</li> <li>• organisation-specific software.</li> </ul>	<ul style="list-style-type: none"> <li>▪ printer</li> <li>▪ scanner</li> <li>▪ mouse</li> <li>▪ keyboard</li> </ul> <ul style="list-style-type: none"> <li>• storage device(s) – internal/external</li> <li>• operating system</li> <li>• software.</li> </ul> <p>General features, benefits, limitations and application/use of a range of hardware and software products.</p> <p>Definition of:</p> <ul style="list-style-type: none"> <li>• vendor.</li> </ul> <p>Awareness of a range of commonly used vendor products.</p> <p>An awareness of emerging technologies relevant to the ICT industry and their effect on:</p> <ul style="list-style-type: none"> <li>• current work practices</li> <li>• productivity</li> <li>• employment</li> <li>• education and training</li> <li>• market conditions</li> <li>• cost effectiveness.</li> </ul> <p>Recognition of learning as an ongoing process and the need to remain current in terms of knowledge, skills and qualifications.</p>
	<p>2.2 Establish that all of the <i>equipment</i> locations and service requirements are maintained according to organisational requirements and prevailing policies and procedures.</p>	<p><i>Equipment</i> may include but is not limited to:</p> <ul style="list-style-type: none"> <li>• workstations</li> <li>• personal computers</li> <li>• modems and other connectivity devices</li> <li>• printers</li> <li>• DSL modems</li> <li>• hard drives</li> <li>• monitors</li> <li>• switches</li> <li>• hubs</li> <li>• personal digital assistant (PDA)</li> <li>• other peripheral devices.</li> </ul>	<p><b>Learning experiences for the HSC must address:</b></p> <p>A broad understanding of the importance of and standard procedures for:</p> <ul style="list-style-type: none"> <li>• conducting hardware and software audits</li> <li>• maintaining equipment inventories and service/maintenance schedules and logs (documentation).</li> </ul>