



ICA10105  
Certificate I in Information Technology



**ICAU1204B**

**Locate and Use Relevant Online Information**

**(25hrs)**





Comet Bay College

Certificate I in Information Technology

## ICAU10105 Certificate I in Information Technology

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### Description

*This unit defines the competency required to use search engines to locate required information on the internet and assess the content of sites for accuracy, currency and/or authority. The following units are linked and form an appropriate cluster: ICAU1213B Conduct on line transactions ICAS2243B Detect and protect from spam and destructive software No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.*

### Employability Skills

This unit contains employability skills.

### Performance criteria

Element	Performance criteria
1. Conduct a basic search using a search engine	<ol style="list-style-type: none"><li>1.1 Open an internet application and locate and access a <b>searchengine</b> on the internet</li><li>1.2 Enter appropriate key words into the <b>searchengine</b> to locate the desired information</li><li>1.3 Refine a search depending on outcomes of the original search</li><li>1.4 Conduct a thorough search within a website using the provided internal search facility if available</li></ol>
2. Conduct an advanced search using search tools	<ol style="list-style-type: none"><li>2.1 Use advanced search features, provided in most <b>searchengines</b></li><li>2.2 Use <b>Booleansearch</b> techniques when required to enhance the search</li><li>2.3 Use multiple or meta search tools with a range of key words</li><li>2.4 Use <b>searchengines</b> particular to a field of knowledge to refine the outcome</li><li>2.5 Access related virtual community sites and newsgroups and note their objectives and operational arrangements</li><li>2.6 Conduct a search with domain names to refine the search</li></ol>
3. Use information that has been located	<ol style="list-style-type: none"><li>3.1 Cross-reference the information found by using several websites to determine the accuracy of the information obtained</li><li>3.2 Check the date that the website was last updated or the</li></ol>

properties of the website to determine the currency of the information

3.3 Determine the website authority by looking at copyright statements, privacy statements and organisational information

4. Save and print information

4.1 Save information found in different file forms

4.2 Print information found in different file forms

## Skills and Knowledge

### Required skills

- Understanding key words
- Operating a PC
- Opening web pages
- Using PC peripheral hardware

### Required knowledge

- Using an internet web browser
- Using internet search functions
- Using research techniques
- Evaluating and assessing the authority of information
- Different types of search engines
- Copyright and privacy statements

## Range statement

*The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised 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.*

**Search engine** may include:

- Snap
- Questfinder
- Ask Jeeves
- Google
- Metacrawler
- Alta Vista
- Excite
- Infoseek
- Findlink
- Northern Light
- AOL Netfind
- Hotbot
- LookSmart
- Metagopher
- Netscape
- Lycos
- Open Text
- WebCrawler
- Go To Dot Com
- Beaucoup
- Meta Search
- Search.com
- Go2Network
- Savvy Search
- Profusion
- Dogpile
- Yahoo

**Boolean search** may use terms such as:

- AND
- OR
- NOT

## 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 the Training Package.*

### Overview of assessment:

#### **Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Evidence of the following is essential:

- Assessment must ensure the ability to use search tools to locate information and make an informed assessment of the accuracy, currency, authority and reliability of the site and information located.

To demonstrate competency in this unit the person will require access to:

- Personal computer with internet capability
- Printer

#### **Context of and specific resources for assessment**

Locating and using online information is an increasingly important business and personal function. Many organisations encourage activities and transactions to be conducted online. An increasing number of government provided information services and transactions require online user capability for effectiveness.

The sourcing and verification of online information is an increasingly important research task for both individuals and organisations as a growing proportion of suppliers and customers use online facilities to market or secure good and services.

The breadth, depth and complexity of knowledge and skills in this competency would prepare a person to perform a defined range of activities many of which may be routine and predictable.

Assessment must ensure

- Applications may include a variety of employment related skills including preparatory access and participation skills, broad-based induction skills and/or specific workplace skills. They may also include participation in a team or work group.

#### **Method of assessment**

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.

- 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.
- 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.

**Guidance information  
for assessment**

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICAU1128B Operate a personal computer
- ICAU1133B Send and retrieve information using web browsers and email
- ICAU1213B Conduct on-line transactions
- ICAS2243B Detect and protect from spam and destructive software

An individual demonstrating this competency would be able to:

- Demonstrate knowledge by recall in a narrow range of areas
- Demonstrate basic practical skills, such as the use of relevant tools
- Perform a sequence of routine tasks given clear direction
- Receive and pass on messages and information
- Maintain knowledge of industry products and services

## BOOLEAN RESEARCH METHODS

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### *Where does the term Boolean originate from?*

Boolean searching is built on a method of symbolic logic developed by George Boole, a 19th century English mathematician. Most online databases and search engines support Boolean searches. Boolean search techniques can be used to carry out effective searches, cutting out many unrelated documents.

### *Is Boolean Search Complicated?*

Using Boolean Logic to broaden and/or narrow your search is not as complicated as it sounds; in fact, you might already be doing it. Boolean logic is just the term used to describe certain logical operations that are used to combine search terms in many search engine databases and directories on the Net. It's not rocket science, but it sure sounds fancy (try throwing this phrase out in common conversation!).

Keep in mind that not all search engines and directories support Boolean terms. However, most do, and you can easily find out if the one you want to use supports this technique by consulting the FAQ's (Frequently Asked Questions) on a search engine or directory's home page.

The BOOLEAN search method allows you to type search expressions using the Boolean connectors AND, OR, and NOT and the proximity connectors w/n, f/n, and p/n. These connectors indicate the relationship that two or more terms in the search expression must have in a document in order for the document to be selected. You simply type your terms using the connectors between your terms. Here is what each connector will retrieve:

**AND** – Using AND narrows a search by combining terms. Placing the word AND between terms will retrieve documents that contain both of the terms. For example, gasoline and oil will retrieve documents that contain gasoline and oil.

**OR** – Placing the word OR between terms will retrieve documents that contain either or both of the terms. This is useful for entering synonyms or alternative terms like child or dependent. For example, gasoline or oil will retrieve documents that contain either term or both terms.

**NOT** – Using NOT will narrow a search by excluding certain search terms. Placing the word NOT between terms will retrieve documents that contain the first terms only if the second term does not appear. This connector is useful when your keyword often appears in a context that is irrelevant to your research. For example, if you want to find documents concerning RICO litigation, the search expression RICO not Puerto will exclude documents in which RICO occurs as a part of Puerto Rico.



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## ICAU1130B Locate and Use Relevant Online Information

The Internet is a great tool for finding primary sources for research papers, essays, and other class projects. The key to locating relevant references is to know how to search for information.

Search engines are most useful for finding information when you have a clear idea of what you're looking for, but no idea where to begin looking. If you have a good idea where the information will be, for instance a government agency or newspaper, go to a site that organizes that type of entity, not a search engine.



### **Creating a search strategy**

When you carry out your search, whether it is on a search engine like Google or a library catalogue or journal database, try to have some kind of search strategy worked out before you start so that you are not just randomly typing in general keywords. Don't type in a general word like Africa or Retail and expect to get useful results back first time.

### **How to use a Search Engine**

The more specific you are with your search terms, the more productive your research will be. It is worth your while to learn and use the special search techniques that search engines provide to help focus your search so you end up with more relevant material. The techniques include: including or excluding search terms, exact phrase searching (using quotation marks), proximity searching, and other tools. Each search engine works a little differently, so be sure to check out their Search Tips or Help or Advanced Search options, so you know how they're set up.

## Boolean searching

Many library catalogues and databases use something called Boolean Operators (also called Boolean Logic) as a way of structuring searches so that you can combine terms to include or exclude keywords.

These are the operators:

- AND - use this to include the search terms you really want, such as children AND Ethiopia
- OR - use this to look for items on either children OR animals
- NOT - use this to exclude terms that you don't want - health NOT children
- you can also combine these operators to create more complicated searches by using brackets: Children AND (Ethiopia OR Kenya) this will look for items about children in either of those countries. Use this with care.

## Stemming, truncation and wildcards

Some databases and catalogues automatically search for slight variations on the term you are searching for. But others may not do this automatically, so look at the search instructions.

You may be asked to put a symbol at the end of a word stem in order to search for all the variants on the word stem. The most commonly used symbol is the **asterisk (\*)**.

So therefore, **child\*** will also look for **children** and **childhood**, etc.

Google now offers stemmed searches - so if you type in **boat** it will also look for **boats** and **boating**, etc. Alternative Spellings.

Consider whether the items you are looking for may use US or UK style spellings - are you looking for an organisation or an organization or a programme or program?

Sometimes it may be wise to search for both spelling versions if or use a truncation or stemming feature to allow for both versions, such as child AND health program.\*





### **Saving search results**

When you have located some results, you may wish to save them for later use.

Don't assume you will be able to remember something you came across whilst searching, especially if you go off at tangents, keep notes about interesting items you come across.

In the Internet Explorer browser you can store websites pages you want to refer back to by using the Favourites feature.

Google has resources available such as Google Notebook and Google Reader which are useful for saving your information.

### **Credibility of online information**

How can you tell if your search results are any good?

There are different factors to consider when assessing quality:

- Ranking Higher ranked articles are usually more widely read and therefore one would think ...more reliable.
- Authors, Peer Reviewing and Hosts Look for what others have said about the information.
- Up-to-date?: assessing currency of information. Most information will have a date when it was included. Reliability and age will depend on the subject matter. Historical information may not be affected but Information Technology information quickly dates.
- Other search engines. Check information in other search engines.

## Google

Google is the biggest search engine database in the world: it currently claims to monitor 8 billion web pages. It uses spidering software to automatically crawl the web and find sites for inclusion in the Google index. Google features:

- Ranking: it uses a ranking system (what is this) to sort results that may help you find suitable items quickly if your search terms are relatively specific
- Upper or lower case?: Google is NOT case sensitive
- Word variations: Google uses stemming technology. When appropriate, it will search not only for your search terms, but also for words that are similar, ie: vaccines / vaccinations
- Spelling: it can correct your spelling mistakes - it suggests alternatives where it thinks there may be an error
- Advanced search: it can be searched using broad terms or by using advanced search methods to narrow down your search strategy

If you have tried a search, got too many results or not got anything immediately useful, then try to refine your search criteria further.

For this, you can use the Advanced Search features on Google. The easiest way to do this is by using the Advanced Search page.

Alternatively, you can learn the special characters which Google uses to control these searches and type them directly into the normal search box. These include:

**Phrases:** you can put quotes around your search words in order to "look for an exact phrase"

**Search results must include a word:** If you definitely want a word included in your results, then use the + sign in your search to make sure. Place the + sign immediately next to the word you want included, with no gap : e.g. +sussex development studies.

Google also ignores common words (such as "where" and "how"), in order to reduce irrelevant results: if you want these to be included use the + sign.

**Search results must not include a word:** putting a minus sign ("-") in front of words takes out terms you may want to avoid. The search paul - mccartney will search for item about Paul but not Paul McCartney. Do not put a space between the minus sign and the word you are excluding.

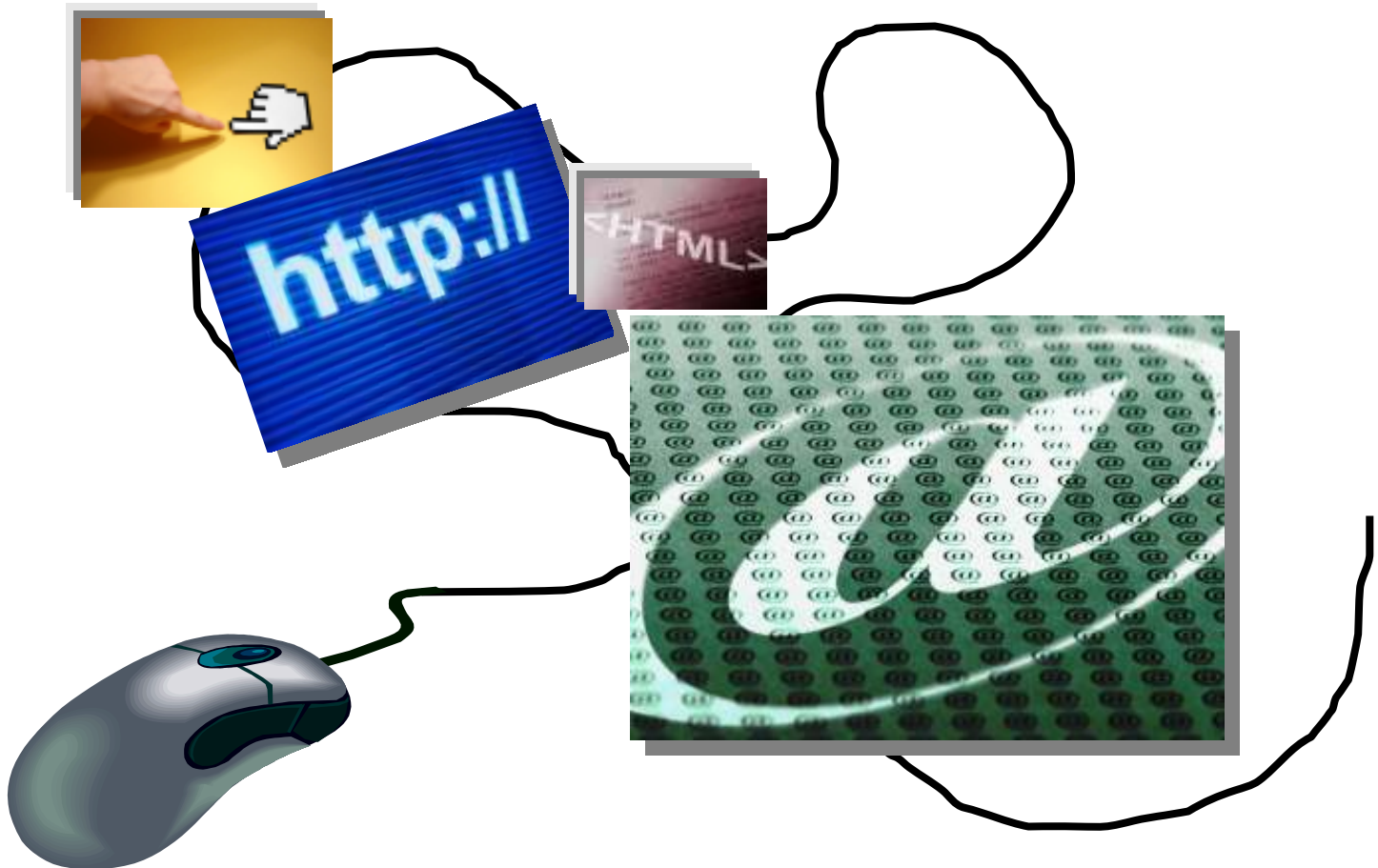
**Synonym Search:** If you want to search not only for your search term but also for its synonyms, place the tilde sign ("~") immediately in front of your search term.

**Other useful options found on the Advanced Search page include:**

**Domain:** you can include or exclude items from a specific website.

**Language:** opt to search for items in particular languages.

**Format:** if you are just looking for items in a particular format such as PDF , you can choose this as an option.



# List of Search Engines and Directories

## A-Z OF MAJOR SEARCH ENGINES

Web name	I have used this search engine	I have heard of it but I haven't used it	Never heard of it
<b>AlltheWeb</b> <a href="http://www.alltheweb.com">www.alltheweb.com</a>   <a href="#">ADD URL</a>			
<b>Alta Vista</b> <a href="http://www.altavista.com">www.altavista.com</a>   <a href="#">ADD URL</a>			
<b>AOL Search</b> <a href="http://aolsearch.aol.com/aol/index.jsp">aolsearch.aol.com/aol/index.jsp</a>   <a href="#">ADD URL</a>			
<b>Ask Jeeves</b> <a href="http://www.askjeeves.com">www.askjeeves.com</a>   <a href="#">ADD URL</a>			
<b>Entire Web</b> <a href="http://www.entireweb.com/search">www.entireweb.com/search</a>   <a href="#">ADD URL</a>			
<b>Exactseek</b> <a href="http://www.exactseek.com">www.exactseek.com</a>   <a href="#">ADD URL</a>			
<b>Excite</b> <a href="http://www.excite.com">www.excite.com</a>   <a href="#">ADD URL</a>			
<b>Gigablast</b> <a href="http://www.gigablast.com">www.gigablast.com</a>   <a href="#">ADD URL</a>			
<b>GoClick</b> <a href="http://www.qoclick.com">www.qoclick.com</a>   <a href="#">ADD URL</a>			
<b>Google</b> <a href="http://www.google.com">www.google.com</a>   <a href="#">ADD URL</a>			
<b>Hotbot</b> <a href="http://www.hotbot.com">www.hotbot.com</a>   <a href="#">ADD URL</a>			
<b>Inktomi</b> <a href="http://www.inktomi.com">www.inktomi.com</a>   <a href="#">ADD URL</a>			
<b>intelseek</b> <a href="http://www.intelseek.com">www.intelseek.com</a>   <a href="#">ADD URL</a>			
<b>Jayde</b> <a href="http://search.jayde.com">search.jayde.com</a>   <a href="#">ADD URL</a>			
<b>LookSmart</b> <a href="http://www.looksmart.com">www.looksmart.com</a>			
<b>MSN Search</b> <a href="http://search.msn.com">search.msn.com</a>   <a href="#">ADD URL</a>			
<b>MSN Search</b> <a href="http://search.msn.com">search.msn.com</a>   <a href="#">ADD URL</a>			
<b>Mirago</b> <a href="http://www.mirago.com">www.mirago.com</a>   <a href="#">ADD URL</a>			
<b>National Directory</b> <a href="http://www.nationaldirectory.com">www.nationaldirectory.com</a>   <a href="#">ADD URL</a>			
<b>Netscape Search</b> <a href="http://search.netscape.com">search.netscape.com</a>			
<b>ODP</b> <a href="http://www.dmoz.org">www.dmoz.org</a>			
<b>Overture</b> <a href="http://www.overture.com">www.overture.com</a>			
<b>SearchFeed</b> <a href="http://www.searchfeed.com">www.searchfeed.com</a>			
<b>SearchHippo</b> <a href="http://www.searchhippo.com">www.searchhippo.com</a>   <a href="#">ADD URL</a>			
<b>Teoma</b> <a href="http://www.teoma.com">www.teoma.com</a>   <a href="#">ADD URL</a>			
<b>WebCrawler</b> <a href="http://www.webcrawler.com">www.webcrawler.com</a>   <a href="#">ADD URL</a>			
<b>Wisnut</b> <a href="http://www.wisnut.com">www.wisnut.com</a>   <a href="#">ADD URL</a>			
<b>Yahoo</b> <a href="http://www.yahoo.com">www.yahoo.com</a>   <a href="#">ADD URL</a>			

