

## *Research Skills Tutorial: ZITE8106 Cryptography & ZITE8104 Computer Security*

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## STARTING YOUR RESEARCH

1. FORMULATE YOUR QUESTION

2. WRITE DOWN KEY TERMS

3. FORMULATE YOUR STRATEGY

- Limit the time period if you need current information
- What type of resources are needed: books, journal articles, newspapers
- How much information is required
- What aspects, e.g. computer science, legal, economic, social etc

4. CHOOSE APPROPRIATE DATABASES

5. CONDUCT THE SEARCH

6. EVALUATE RETRIEVED INFORMATION

7. MODIFY YOUR SEARCH STRATEGY AND REDO THE SEARCH, IF NECESSARY

## EXAMPLE OF A SEARCH STRATEGY

Write down your topic:

Computer security

Write down key terms:

Computer  
Security

Write down synonyms, related terms:

Computer	Security
Network	authentication

Formulate the search strategy:

(computer\* OR network\*) AND (security OR authentication)

\* asterisk is the Truncation symbol. It allows searching any words coming after it.

E.g. Computer\* will also search computers.

## HOW TO USE THE RESOURCES AT THE ACADEMY LIBRARY

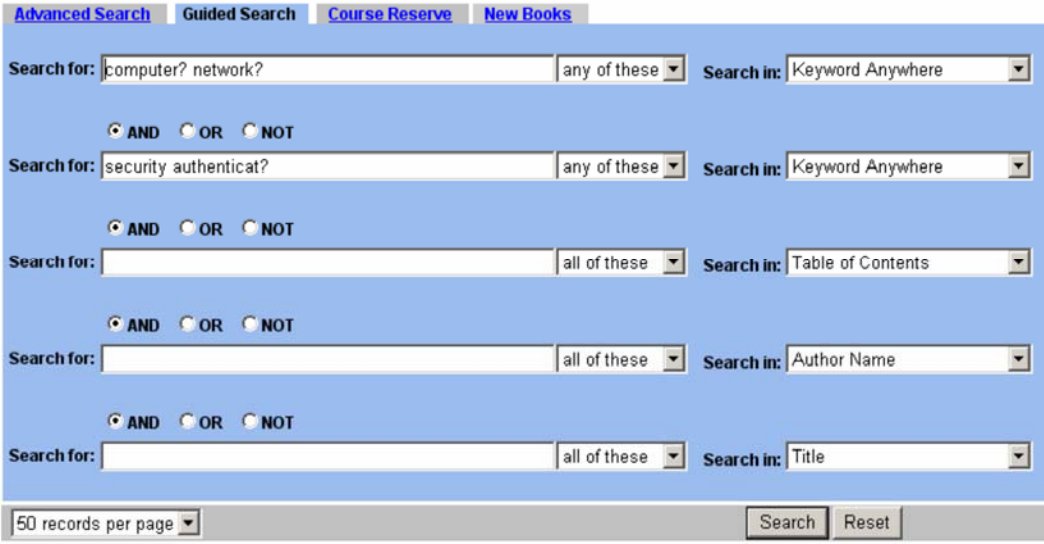
### 1. SEARCH THE CATALOGUE FOR BOOKS

Use the Guided Search.

Using the search strategy, type in the search as follows:

NOTE: the truncation symbol for the catalogue is the ?.

Database Name: Academy Library



The screenshot shows the 'Guided Search' tab selected. It features five search rows. The first row has 'Search for:' containing 'computer? network?' and 'Search in:' set to 'Keyword Anywhere'. The second row has 'Search for:' containing 'security authenticat?' and 'Search in:' set to 'Keyword Anywhere'. The third row has 'Search for:' empty and 'Search in:' set to 'Table of Contents'. The fourth row has 'Search for:' empty and 'Search in:' set to 'Author Name'. The fifth row has 'Search for:' empty and 'Search in:' set to 'Title'. Each row has radio buttons for 'AND', 'OR', and 'NOT' between the search fields. At the bottom, there is a '50 records per page' dropdown, a 'Search' button, and a 'Reset' button.

You will get over 1429 items.

Do the same search, this time searching in the Title field. By narrowing the search in this way, you will get very relevant items. The results are down to 153.

You can also do the same search, this time searching in the Table of Contents. This search will only look for the terms in the Tables of Contents of the books.

Click on the title to see the **Holdings** of an item (This shows the call number)

Click on **Full View** to see the subject headings.

Click on the **Contents** to see the chapter headings of the book.

## 2. SEARCH THE DATABASES FOR JOURNAL ARTICLES

--CrossSearch

All electronic resources are accessed through **CrossSearch**. Click on CrossSearch link on home page.

Log in the CrossSearch with your ADFA login.

Search | Find Database | Find e-Journals/Articles | My Space | Logout | Help | aþkus  
New Search | Search Results | Previous Searches | 59902204

### Search

Identify database:  
Quick Sets  
Business & Mgt  
Humanities & Soc Sci  
Science &  
Technology

Simple / Advanced

Enter search term:  **GO**

Set: Business & Mgt contains 6 databases

Database Name	Type	Actions
<input checked="" type="checkbox"/> <a href="#">ABI/INFORM (ProQuest)</a> Full Text	Databases	<a href="#">i</a> <a href="#">+</a>
<input checked="" type="checkbox"/> <a href="#">Business Source Premier(EBSCO)</a> Full Text	Databases	<a href="#">i</a> <a href="#">+</a>
<input checked="" type="checkbox"/> <a href="#">Periodicals Archive Online (formerly PCI-Full Text)</a> Full Text	Databases	<a href="#">i</a> <a href="#">+</a>
<input checked="" type="checkbox"/> <a href="#">Expanded Academic ASAP (Gale)</a> Full Text	Databases	<a href="#">i</a> <a href="#">+</a>
<input checked="" type="checkbox"/> <a href="#">Web of Science</a>	Databases	<a href="#">i</a> <a href="#">+</a>
<input checked="" type="checkbox"/> <a href="#">JSTOR</a> Full Text <b>JSTOR</b>	Databases	<a href="#">i</a> <a href="#">+</a>

## SEARCH:

You can use either Simple or Advanced search.

You can search up to 10 resources simultaneously.

To select the resources you wish to search simultaneously, you can use

Quick Sets

OR

Your own selection from the list of databases

OR

A list of your favourite databases that have been saved using My Space > My Databases (if you create your own list, when you log in to CrossSearch, you will first see this list instead of Quick Sets)

### 1. Quick Sets:

These are collections of resources that have been pre-selected by liaison librarians and grouped together by subject.

There are three subject areas:

Business & Mgt  
Humanities & Soc Sci  
Science & Technology

### 2. Select you own resources:

From the **Identify Database** drop-down menu, select **Subject Category** to find all resources in your subject area.

Not all the resources are cross-searchable, ie cannot be searched simultaneously. Those which are cross-searchable, are indicated by a box next to their title. Click the boxes next to databases to search them together. You can place your favourite resources in My Databases. Once you do this, when you log in to CrossSearch, you will see this list instead of Quick Sets.

Relevant databases for Cryptography and Computer Security courses are:

- ACM (Association for Computing Machinery)
- ScienceDirect
- Expanded Academic
- ProQuest 5000 International
- IEEE Xplore
- Inspec
- Safari Technology ebooks
- Business Source Premier

### **FIND DATABASE:**

You can find a database by:


- ® Title (if you know what you are looking for)
- ® Locate (by type of resource)
- ® Category (by subject)


### **FIND eJOURNALS/ARTICLES:**


After you click on this tab,

In the **Find a Journal** search box, type the title of the journal.  
In the **Find an Article** search box, type the article details.

### **My Space**

EShelf: Use the  Add to Basket button shown next to each reference in the results page to store articles you wish to keep.

My Databases: Your favourite databases can be selected using the  Add to My Sets button.


Saved Searches: After you perform a search, you can click on Previous Searches to see all the searches you have performed in that session. If you want to permanently save a search, click on the  button. To see saved searches, go to My Space > Saved Searches.

Preferences: You can customise the way the results are displayed, and choose the number of records per page.


## RESULTS:

You can perform the following for the results of your search:

### ® Save records or send records to EndNote

- On the results page, add records to your eShelf by clicking on the  button.
- At eShelf, select each record you want.
- Click on **Selected** button.
- Click on **Save**.
- On Record Format, either choose Save or Citation Manager to send records to EndNote.



### ® Email

- Add records to your eShelf by clicking on the  button.
- At eShelf, select each record you want.
- Click on **Selected** button.
- Click on **Send**.

### ® Set up Alerts

Alerts are searches you can schedule to run automatically in CrossSearch and email you the results. They are saved in your 'Saved Searches' file.

To set up a new alert, follow these steps:

- First create and run a search. (This will be logged in 'Previous Searches')
- Click on 'Previous Searches'
- Save the search that you wish to form the basis of your alert. Simply click on the 'Add to saved searches' icon  for the relevant Search
- Click on 'My Space'
- Click on 'Saved Searches'
- Find the search of interest. Click on the 'Alert' icon  for that particular search.
- Enter details in the pop-up form, such as an alert name, your email address, how often you want to run your alert, and if you want to receive a message even if there are no new records for your alert.
- Click Submit.

You will receive an email message every time your alert is run and has found new records. [If there are no new records, you will only receive an email alert if you clicked YES to the question: "Do you want a message even if there are no new results?"]

### **Peer-reviewed vs Popular journals**

Most lecturers at the university level demand that all or most of the articles you use for researching and writing your assignment come from scholarly journals.

Scholarly journals contain serious research and authoritative information. The articles are written by experts in their area.

Many scholarly journals are "peer reviewed" or "refereed", that is articles published in them have been subjected to a rigorous approval process by other scholars in the discipline.

Most databases include both peer reviewed journal articles and news from more popular magazines.

### **Examples of peer reviewed journals:**

ACM transactions on information and system security  
Information systems security

### **Examples of popular journals:**

Computer Shopper  
PC Australia

--Examples of searching databases

Go to the **Find Database** section in CrossSearch.

Locate **ScienceDirect**.



Search for:

Computer! OR network AND security OR authentication

In the Title field.

The screenshot shows the ScienceDirect search interface. At the top, there is a navigation bar with 'Home', 'Browse', 'Search', 'My Settings', 'Alerts', and 'Help'. Below this is a 'Quick Search' section with input fields for 'Title, abstract, keywords', 'Author', 'Journal/book title', 'Volume', 'Issue', and 'Page'. A 'search tips' link is also present. Below the search bar is a 'Add to my Quick Links' button. The main search area is titled 'All Sources | Journals | Books | Reference Works' and includes an 'Advanced Search | Expert Search' link. The search query is entered as 'computer! OR network' in the first field and 'security OR authentication' in the second field, both with 'within: Title' selected. The 'Include' section has checkboxes for 'Journals' and 'All Books' checked, and 'Source' set to 'All sources'. The 'Subject' dropdown is open, showing options like '- All Sciences -', 'Agricultural and Biological Sciences', 'Arts and Humanities', and 'Biochemistry, Genetics and Molecular Biology'. The 'Dates' section is set to '1997' to 'Present' with 'All Years' selected. At the bottom, there are 'Search', 'Clear', and 'Recall Search' buttons, along with a 'Search Tips' link.

After you finish searching the database, close it from the X at the top right corner. You will be taken back to the CrossSearch page.

This time locate **IEEE Xplore**.

Type in Cryptography in the Basic search box.

Go back to the **Find Database** section in CrossSearch.

This time locate **ProQuest 5000 International**.

Go to Advanced Search. Type in cryptography and computer security. Tick **Full text documents only** and **Scholarly journals, including peer reviewed**

## E-JOURNALS

From the Library's CrossSearch portal, click on **Find e-Journals / Articles**. Type the journal title 'Journal of Cryptology' in the search box below **Title begins with**. The Library's holdings of this journal are displayed. Click on the links for access.

## SEARCHING THE WEB

**Goggle** - <http://www.google.com>

**SCIRUS** – <http://www.scirus.com>

**Google Scholar** – <http://www.scholar.google.com>

Important tips:

- Enclose phrases in quotation marks, e.g. "computer security"
- Search site:gov cryptography to find government documents that contain cryptography

## EVALUATING INFORMATION

Who is the author?

- Is it an author with academic qualifications, a journalist, or a non-specialist?
- What organisation published the information?
- Or is it from a news organisation reporting to the wider community?
  - Or from a government body or related organisation to assist policy makers?
  - Or has it been produced by an industry or commercial organisation?
  - Or is it a personal document reflecting only an individual's opinion?

When was the material published?

- When was the file last updated?
- Why was the material published?
- Does it report on new research?
- Does it review existing research?

Who is the intended audience?

- Does it contain advertising?
- Is it trying to persuade you to adopt a particular viewpoint?
- Can you see any bias evident?

(adapted from University of Canterbury, Library)

ZITE 8106 Cryptography  
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