School of ITEE – Thesis (Coursework)

Library workshop
Objectives

Find relevant literature for your annotated bibliography/literature review. These resources will inform your report.

Cite these sources accurately throughout your report using the correct citation style.

Consult your ECP and the School of ITEE website for full details about assessment requirements

Session content

Researching and searching
• Library guides
• Preparing, planning and conducting searches

Literature searching using:
• UQL Search
• Databases – IEEE, Scopus, Google Scholar …

Referencing:
• IEEE and other referencing style guides
• Using EndNote to create a bibliography (brief overview)
Library guides

Subject guides for useful resources in your subject area, for eg.

- Computer science
- Electrical engineering

https://web.library.uq.edu.au/research-tools-techniques/research-subject

See also our information guides for how to find:

Patents, Standards and more

https://web.library.uq.edu.au/research-tools-techniques/search-techniques/where-and-how-search/search-type-information

ITEE thesis coursework guide for links to reference books, databases, websites and more.

http://guides.library.uq.edu.au/iteeprojects
A critical review of the literature

A literature review provides an account of what has been published on a topic by accredited scholars and researchers. It is presented as an argument.

An annotated bibliography provides:
- A list of references with a brief summary of the main arguments or idea of each source.
- A critique or evaluation of the source’s usefulness, reliability, objectivity or bias.
- A reflection on how the source fits into your research

The research process

1. • Analyse the topic
2. • Plan a search strategy
3. • Search for information
4. • Evaluate information (repeat 2, 3 & 4)
5. • Manage information
Analyse: understand your topic

Brainstorm your topic

- background reading
- familiarise yourself with the topic
- make a list of keywords/synonyms (related terms).
- use these as your search terms when looking for books and articles.
Analyse: what kind of information do you need?

• **Basic concepts, theories and ideas/background information**
  > Books, handbooks, encyclopedias

• **Latest research findings** > Journal articles/conference papers/websites

• **Specialised information** > eg. Standards, patents, datasets etc
Plan: where will you find this information?

Books, ebooks, articles, theses > **UQ Library Search, databases**

Research and specialised information, including standards and patents > **Databases**

Grey literature, government reports, etc > **Google, Google Scholar and Google Advanced**

*Remember – always evaluate your results*
Some relevant databases

Articles/conference papers
Scopus
IEEE Xplore
ACM Digital Library
Google Scholar

Standards and Patents
SAI Global; BSOL; Derwent innovations index: IEEE Xplore

Laboratory manuals, current protocols
Wiley Current protocols
Plan: search strategy – identify keywords

Summarise your topic - *Look at the capacity of wind power systems.*

Break your topic apart into keywords – *capacity. wind power systems.*

Brainstorm similar keywords (synonyms, abbreviations) – *capacity OR reserve*

Develop your search phrase/query using AND/OR and other operators

“*power systems*” AND “*wind power*” AND (reserve OR capacity)
Plan: build a search query – use and link keywords

“power systems” **AND** “wind power” **AND** (reserve **OR** capacity)

**AND** focuses the search = fewer results but perhaps more relevant

**OR** broadens the search = more results. Use with synonyms

**Parentheses** (brackets) – use when grouping keywords joined with **OR**

**Phrase searching** – use quotation marks around two or more words to search for exact match, eg. “millimetre wave”, “skin cancer”

**Asterisk** (*) – use to truncate a word. eg. network* = network, networks, networking
Always log in with your student username and password
You may need to edit your search and search terms
Refine your search results using the options on the right
You can refine search results, eg.

Peer reviewed
Book, journal article or other content type
Date of Publication
Search: database searching

Browse databases

Databases by category

• Biotechnology
• Computer science and IT
• Electrical engineering
and more

Key databases: IEEE Xplore, Scopus
Search: improving search outcomes

- **Search in specific fields** eg. Title, Title Abstract Keywords
- Limit by **Categories/Research Areas**
- Limit by **Document Type** e.g. articles, conference proceedings, review articles*
- Limit by **Language**
- Limit by **Source Titles**
- Sort by **Times Cited** – highest to lowest

*use sparingly
Evaluate: assess your search results

A journal article record in Scopus provides a wealth of information to further your research:

- Read abstract to determine relevance and scope of article
- See keywords for additional searches
- View later research that has cited that article
- View references and other articles related by topic
Search: features to enhance research

**Saved search results and marked lists** - create an account to save your searches for easy access to results lists

**Saved search alerts** – create an account or use RSS feeds to receive notifications when new articles match your saved search

**Citation alerts** – receive notifications when a specific article is cited

**Journal TOCS** – (table of contents) receive notification when new content is added to the journal
Search: theses

Find what others have researched and what methodologies are being used.
See theses layout

Find and access theses:
UQ theses—Library Search and UQ eSpace
Australian theses – Trove
International theses – ProQuest dissertations and theses global database, open access repositories

The Library can purchase theses for your research

http://guides.library.uq.edu.au/how-to-find/theses/uq-theses
Search: specialised information

Company and industry information
Maps
News and newspapers
Patents
Standards

https://web.library.uq.edu.au/research-tools-techniques/search-techniques/where-and-how-search/search-type-information
Search: Google Scholar https://scholar.google.com.au

in Settings select Library links
search for university of queensland
tick the box and Save
search on your topic
access subscription journal articles via @ UQ Library

Advanced Search

Find pages with...
- all these words: skin cancer
- any of these words: "millimetre wave" OR microwave
- numbers ranging from: to

Then narrow your results by...
- site or domain: gov.au
- SafeSearch: Show most relevant results
- file type: Adobe Acrobat PDF (.pdf)
- usage rights: not filtered by licence
Evaluate: look at and evaluate your results

Once you’ve found information that matches the topic requirements you should analyse or evaluate the information sources, especially with websites.

Think critically about:

• relevancy
• reliability, validity, accuracy
• authority
• timeliness
• point of view or bias
Online modules

Assignment Essentials
Master your assignments and build your study skills.

Build your study and assignment skills

Digital Essentials

Build your digital skills with modules on Digital citizenship, Communicate and collaborate online, Employability, Working with data and more.
Lynda.com – online training

*Lynda.com* – software and skills training. Includes tutorials on using software applications, video, statistics etc.

https://web.library.uq.edu.au/library-services/training/lyndacom-online-courses

Go to [www.lynda.com](http://www.lynda.com)

- Click *Sign in*
- Select *Sign in with your organization portal*
- Type [www.uq.edu.au](http://www.uq.edu.au)
- Click *Continue*
- Log in with your *student username and password*
Exercises

Look at the Library guides page http://guides.library.uq.edu.au/

Search for a book or ebook on your topic using UQ Library

Search for:
• Three recent journal articles/conference papers in your topic area in IEEE or Scopus
• Search for your project supervisor in Scopus
• Find relevant information using Google Scholar or a Google Advanced search
• Access Lynda.com (via Library site)
Manage: referencing

Referencing helps to avoid plagiarism and enables readers to locate the references you have used.

Referencing includes:

• in-text referencing within the body of your report
• reference list at the end of report

Which referencing style?

IEEE numbered style. Always check with your supervisor.

NB also cite accurately in your annotated bibliography.

You can use EndNote (or other referencing management software) to help with referencing. (eg.BibTeX, Mendeley, Zotero)
Referencing software - EndNote
https://www.library.uq.edu.au/research-support/endnote

UQL Search
Scopus
Google Scholar
*direct export*

Websites
*manual entry*

EndNote Library

Word document

Bibliography using the IEEE numbered style

*Note:* Make a copy of your document and ‘Convert to Plain text’ before submitting to *Turnitin*
Useful resources

SAGE research methods online (SRMO) (via Library Search)
An online tool to assist you in understanding methods to help you design research projects, conduct research and write up your findings. Contains links to books, dictionaries, journal articles, handbooks and videos.

Literature reviews guide - [http://guides.library.uq.edu.au/research-techniques/literature-reviews](http://guides.library.uq.edu.au/research-techniques/literature-reviews)

- Blair, L., & SpringerLink. (2016). **Writing a Graduate Thesis or Dissertation (Teaching Writing).** Rotterdam: Sense.
Useful links


Subject guides: http://guides.library.uq.edu.au/


School of ITEE resources: http://www.itee.uq.edu.au/thesis

EndNote https://web.library.uq.edu.au/research-tools-techniques/referencing/referencing-software/endnote

Library training: classes and online https://web.library.uq.edu.au/library-services/training
Help and support

Services for Researchers
https://web.library.uq.edu.au/library-services/services-researchers

Services for students
https://www.library.uq.edu.au/library-services/services-for-students

Contact AskUs Service
In person: Visit a library service point
Chat, email or phone
https://web.library.uq.edu.au/contact-us

Contact your Librarian

Adriana De Michiel
Liaison Librarian
+61 7 344 33808
ademichiel@library.uq.edu.au
Dorothy Hill Engineering & Sciences Library, St Lucia
Thank you