E-Resources for Technical and Computing Disciplines

As a student of technical, computing and related disciplines you should familiarise yourself with a range of data sources, including E-Journal publications, E-Books, social and economic data, Legal sources, Theses and Dissertations, WWW resources and other reference sources, such as newspapers.

This guideline assumes you have a general familiarity with Library Web pages, are familiar with E-Journals (and Peer Reviewed Journals), are familiar with general principles for searching such as use of keywords and are familiar with tools for locating specific E-Resources. If you are unsure about any of these issues, please also see the following guides:

*Online and remote students using the Library for Online Programmes are advised to see the guide and video* Brief Guide to the Library for Online Programmes

- Tips for Searching
- Overview of Information Types and Information Sources
- How to Locate E-Resources
- Finding E-Resources Unavailable via our Systems
- Carrying your Literature Review or Systematic Review
- Searching for Theses and Dissertations
- Searching for Newspapers

Using Discover for E-Books and E-Journals

You should consult Discover as an initial source for E-Books and E-Journals; Discover includes all commercial E-Journal and E-Book collections subscribed by the University Library. *Note - Discover does not include national data, statistics, standards, patents, legal and other specialist databases (see later sections of this guide).*
You can search Discover from the University Library Web site and our LibGuides subject pages (note, these search options will display both print collections held at the University Library, abstract/citation results where full text may require further research and digital e-resources).

Additionally, Discover can be searched from the Library for Online Programmes (this option is recommended for online/remote students since this version of the Library is configured to display digital Library resources only (as far as possible (rather than print or abstract-only resources). The Discover search box shown in the Library for Online Programmes provides search filters directly on the page, such as subject-specific filters, ‘Ebooks (only)’, ‘Peer Review (only)’ and ‘Unrestricted (only)’ i.e. excluding restricted items such as DRM e-books from the search.

Following your Discover search, you can further refine search results using options such as ‘Subject’, ‘Language’, ‘Location’ or year range:

For additional detailed advice on searching Discover, information on search refinements and use of a personal profile to store personal preferences, see our guide Using Discover for E-Journals, E-Books and other Scholarly Content
Alternative Major E-Journal Platforms

In addition to Discover you can also use alternative multi-source platforms and citation databases, these include platforms such as SCOPUS and Web of Science. Use of alternative major databases may be necessary to demonstrate the breadth of sources used in your literature review plan or final research project proposal. You can see a full list of major platforms in our LibGuides subject pages for your academic discipline.

Additionally, online students can see a summary of major platforms shown in the E-Resources area of the Library for Online Programmes.

Major platforms such as SCOPUS and Web of Science can also be useful to confirm article citation/publication details, to use detailed search options for a more accurate search. Web of Science includes a variety of advanced search options to filter your search by subject area, author, document type, country location and other criteria:

SCOPUS includes similar options to filter a search by subject and other factors:
SCOPUS, Web of Science and other major platforms are primarily bibliographic databases, providing citations & abstract information derived from a wide range of global Library databases; these can provide a powerful additional search option alongside Discover. However, these platforms also usually provide a “Full Text” icon alongside search results, in some cases you may need to perform further research to locate items when searching via bibliographic databases How to Locate E-Resources and Finding E-Resources unavailable via our Systems.

In addition to commercial platforms, you can also use additional platforms such as Google Scholar or CrossRef to confirm the accuracy or missing details for a citation:
Google Scholar can be useful to determine if an unsubscribed article is freely available via the WWW (Scholar includes freely accessible scholarly papers from across the WWW and many University Library subscribed collections/platforms).

If you visit or search Google Scholar from Library Web pages then you will be logged in when you encounter resources in commercial collections/platforms. You should avoid accessing Google Scholar from its normal public URL, since you won’t be able to open secure content subscribed by the Library.

You can access Google Scholar from some Library Web pages. Additionally, the Library for Online Programmes provides access to a Google Scholar search box/link from the Library for Online Programmes homepage:

When using Scholar you can often access items from the normal links shown in results, however, sometimes you may need to use the alternative ‘Is it @ Liverpool’ or other suggested sources shown in the right menu:

As seen with all individual platforms/databases, you can create a personal profile on platforms such as Discover, SCOPUS, Web of Knowledge etc. This allows you to save searches, bookmark resources and personalise your experience when using these platforms, please see detailed guides on using these platforms within individual systems, see our guide Using Discover for E-Journals, E-Books and other Scholarly Content.
SCOPUS and Web of Knowledge also provide valuable Journal Impact reporting tools, allowing you to evaluate the importance or impact of individual journals, articles or authors (e.g. via citation ranking from other article references), this topic is described in further detail later in this guideline.

Further help on using journal impact/ bibliometrics tools is provided via the University of Liverpool Web site (see the Research LibGuide).

Additionally, the Library for Online Programmes provides a range of guides and video on using journal impact tools (see the ‘Journal Impact’ icon in the side menu).

**Individual E-Journal Collections**

You should also be aware of individual E-Journal collections; content derived from individual collections typically will also display in multi source platforms such as Discover, or Web of Science but these platforms can display results slightly differently when viewed individually; these platforms also typically provide advanced search options to assist your research. You may need to consider use of individual E-Journal collections as part of your literature review or for planning your dissertation/ thesis proposal.

You can see a full list of individual full text platforms in our LibGuides subject pages for your academic discipline.

Additionally, online students can see a summary of major platforms shown in the E-Resources area of the Library for Online Programmes.

Inter-disciplinary full text collections include:

- ProQuest
- Emerald
- SAGE
- MetaPress
- ScienceDirect
Additionally, a search box is provided to search individual collections and major databases from the Library for Online Programmes (see the E-Journals page). You can refine the list of collections shown using the subject discipline selector beneath the search box:

You can also search key collections and major platforms from the 'Key Databases' search box (see the Library for Online Programmes homepage or the E-Journals page):
Additional sources

The following suggested sources are available from our subject LibGuides pages or other locations accessible from the University of Liverpool Library Web site, such as A-Z of databases (see the Electronic Library page).

Additionally, these sources are also available from the Library for Online Programmes (see the E-Journals page, subject pages etc.).

- Annual Reviews - providing many Full Text E-Journal materials across a wide range of technical disciplines.
- IEEE – an engineering and computing focused collection, also providing access to many IEEE international standards and specifications.
- Compendex – also known as ‘Engineering Village’, providing both direct access to online content and links to material via other providers.
- ACM – a large computing and computer engineering focused collection.
- RSC – the Royal Society of Chemistry online collection.
- Scitation – online papers and articles provided by the American Institute of Physics.
- SCIRUS – a scientific and technical search engine, often providing access to full text resources via institutional research archives and other open access providers.
- O’Reilly Open Books
- Espace Patents
- Knovel
- BSI Standards
- Box of Broadcasts (TV & Cable) restricted to UK
- Henry Stewart Seminars

For additional guidelines and tutorials on using individual platforms and citation databases see the following guides:

- Searching for E-Journal Articles and Scholarly Papers
- Using Bibliographic Databases
• Finding E-Resources unavailable via our Systems.

Additionally, the Library for Online Programmes provides a list of detailed guides on using individual databases.

E-Books

You can search across all University of Liverpool E-Books using either Discover or the Library Catalogue. You can access Discover from either the University of Liverpool Library homepage or our LibGuide subject pages (these search boxes will display both printed content held in the University Library, abstract only citations and digital e-resources).

Additionally, you can search for E-Books using Discover from the Library for Online Programmes - including search filters such as ‘E-books (only)’, ‘Search by title’, ‘Unrestricted (only)’ – limiting the search to DRM free i.e. unrestricted E-Books. Online students are recommended to use this Discover search since only full text e-resources will be displayed as far as possible:

![DISCOVER Advanced Search](image)

For general advice on searching for E-Books, please see our guide Searching for E-Books and for locating specific E-Books where you know the publication details, see our guide How to Locate E-Resources.

Data, Statistics, and Reports

You should become familiar with data, reports and statistics sources, including company data, market research and similar sources provided by the Library. You should note that data, reporting and statistical sources are often not included in multi source platforms such as Discover and must be searched separately. These sources
can be summarised as follows:

- General social and demographic reporting and news sources – these sources include Discover and ProQuest.
- Statistical sources – these include census and national statistical information, including collections such as census.ac.uk, the Economic and Social Data Service (ESDS) and the Historical Population Reports (UK/ Ireland only).

You can browse data, statistics and reports sources from our subject LibGuides pages.

Additionally, data, statistics and reports sources are listed in the Library for Online Programmes (see the Data, Markets and Statistics page), you can either visit a database from the list shown or search directly from the page by selecting a database from the pull-down menu, then search by keyword:

In addition to commercial sources for reports mentioned above, you should also consider using WWW search tools identify WWW published documents (e.g. for NGO, official government, corporate or other professional reports), for further information on these options, see our guide Searching the Internet and Evaluating Web Sites.
You can see further examples using these sources in our guide Searching for Data, Reports and Statistics.

Newspapers

You can access Newspaper collections from the main University of Liverpool Library Web site (from here, see the “LibGuides” link, then follow the link to newspapers).

A link is also available to newspapers from the Library for Online Programmes (see the ‘News’ page).

Following the links to our newspaper collections will lead to our main newspaper ‘LibGuide’, providing country-specific, UK, contemporary and historical newspapers:

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<th>e-Newspapers</th>
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<td>These are online versions of newspapers: some current, some digitized facsimiles of historical, worldwide titles.</td>
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<tr>
<th>Contemporary UK Newspapers</th>
<th>Contemporary International Newspapers</th>
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**Contemporary UK Newspapers**

**Main sites**

- [Lexis Library - News](#)
- [Library PressDisplay - UK](#)  
  Coverage: Latest 60 days
- [ProQuest International Newsstand](#)

**Key titles**

**Key:** LPD = Library Press Display \ LL = Lexis Library \ PIN = ProQuest

**English national broadsheets**

- [Financial Times](#)

For further information on our newspaper coverage, see our guide Searching for Newspapers

International Standards

You can access a range of International Standards from our LibGuide subject pages.

Additionally, you can see a summary of International Standards in the Library for Online Programmes (see the ‘ISOs’ page):
International standards specifications include:

- British Standards Online
- IEC: Standards for electronic technologies.
- IEEE: Engineering standards.
- ISO Standards
- UK Ministry of Defence Standards

**Patents**

You can access a range of Patents sources from our LibGuide subject pages.

Additionally, you can see a summary of Patents sources in the Library for Online Programmes (see the ‘Patents’ page):
Patents sources include:

- FreePatentsOnline.com
- Google Patents
- US Patent Office
- USPTO Patent Database

**Law Materials (case law, legislation, legal forms etc.)**

Legal sources include major Legal materials collections such as WestLaw UK/International, Lexis, official sources such as the UK government official documents archive and EU collections such as EUROPA (EU laws). Our legal collections include both international and country-specific materials, including case law, legislation, government papers and other legal materials.

The University Library provides a detailed [LibGuide](#) for legal information, databases and sources.

Additionally you can access a legal sources via the [Library for Online Programmes](#) (see the ‘Law’ page).

Some Legal sources such as WestLaw can be complex to search, however you can search many legal sources quickly from a direct search box provided in the Law area of the [Library for Online Programmes](#). Major legal sources can also be searched from the homepage (See Quick Search/ Key databases). Whilst some direct search boxes are provided to simplify your legal search, you are advised to visit individual legal databases for advanced search features, this is particularly necessary for locating case law and other specialist legal materials.

**WWW Sources**

In addition to Google document/ corporate document search options – allowing you to search the WWW for focused document formats (in PDF, DOC etc.), you can also access a range of recommended WWW platforms and gateways to information.
For further information on these options, see our guide Searching the Internet and Evaluating Web Sites.

Data Sets and Data Mining

Data sets provide raw or systemised research in the form of population, medical, economic or other data types, the process of 'data mining' refers to the process of discovering and interpreting data sets to obtain useful patterns, trends or other observations from data to develop new research theory. You may find existing data sets provide a useful contribution to your own research. Data sets are derived from prior scientific, economic, social or other research projects or major government or statistical agencies. Data sets may be unique or represent longitudinal studies over many years or decades. You should consult your tutors/dissertation or thesis advisor regarding the academic appropriateness or usage of data sets.

Sources of data include the following:

- **Research Pipeline** (directory of data sources).
- **StatLib** (portal to data sources provided by Carnegie Mellon University).
- **DATA.GOV** (US Government data sources on a wide range of social, economic, industrial and international areas).
- **DATA.GOV.UK** (UK Government data).
- **Global Change Mastery Directory** (portal to geographical and biosciences data sources).
- **Google Public Data Explorer** (portal to data available freely on the WWW).
- **DMOZ** (Datasets listed on DMOZ Web Directory).

Data mining sources are also listed on our Research LibGuide.
Additionally, the Library for Online Programmes outlines data mining sources (see our Research Support guide).

Further Help

If you have any questions please contact your Librarian (see list of Liaison Librarians and Librarian for Online Programmes).