HOCHSCHULE FÜR TECHNIK STUTTGART

BIBLIOTHEK

GENERAL SEARCH TIPS

for searching databases

INTRODUCTORY QUESTIONS

Why search databases?
The HFT library's databases provide you with access to professional information on numerous topics that are relevant to your studies and go beyond the range of specialist literature available on our shelves.
Our specialized databases mainly list scientific articles in books and journals, but also university theses and studies, conference proceedings, legal texts and standards. In short, there are numerous works that can be used for term papers, seminar papers and theses.

Why bother with database research when you have Google or ChatGPT?
Our databases provide access to the latest academically verified and reliable sources such as scientific articles, books, and conference papers that are not freely available on the internet and are behind paywalls.
With Google or ChatGPT, you usually don't know exactly how reliable and up-to-date the information you find is. Both scientific and “amateur” texts are listed on the same level.
Database search interfaces often look complicated, but they deliver reliable results that you can cite in your academic work. In addition, our databases often offer tools for managing citations and references, which is particularly useful for academic work.
Our guides explain and describe the various search interfaces in detail. If you have trouble finding what you are looking for, please feel free to ask the library staff for assistance. We are happy to help.

What types of databases are there?
The two main types are:

Full-text database: Hits in these databases contain the entire text for direct viewing or download.

Specialized bibliography: These databases do not contain full texts, but rather bibliographic data: information about authors, titles, sources, publishers, unique document numbers such as ISBN or ISSN, keywords that describe the topic covered, and, in some cases, an abstract that provides a brief overview of the text. This allows you to determine whether the text contains the information you need and to search for the full text using the information in library catalogs.

THINK BEFORE

If you don't know exactly what you're looking for yet, ...

... define your search query:

- (Broad) topics that the texts found should deal with
- Terms or fixed expressions that could or should appear in the title or abstract
- Time references: particularly current or from a specific period in the past

... search broadly. use:

- Truncations (see below)
- Operators (see below)
- Options for each database to filter/restrict the search list retrospectively

SEARCH STRATEGIES

Enter the terms that describe the topic in the search fields of a database. You can use the following strategies to adjust or combine your search terms so that your hit list is either broader or narrower.

Truncation (wildcard search)
You can often achieve a broader search result by truncating, i.e., inserting certain wildcard characters (* ?) before, in, or after a search term.
This also searches for terms that only contain part of your search term or are a grammatically modified, conjugated, or declined form.
A distinction is made between truncation characters that replace any number of characters – not spaces! – including zero characters...

Example: `manage*` finds „**manage**“, „**Manage**r“, „**manage**n“, „**Manage**ment“ etc.
`*endable` finds „**sendable**“, „ext**endable**“, „dep**endable**“ etc.
`con*tr*ct*` finds “**con**struc**tr**ac**t**or”, “**con**stric**t**able”, etc.

...and such characters that replace exactly one character.

Example: `manage?` finds „**manage**s“, „**manage**r“, „**manage**d“ etc.
`??flection` finds „re**flection**“, „in**flection**“, „de**flection**“ etc.
`pri?e` finds „**price**“, „**prize**“, „**pride**“ etc.

You can also combine both wildcards:

Example: comm?n*r finds “**comm**u**n**icator”, “**comm**a**n**der”, etc.

➔ *Whether truncation is supported by a database and which characters you can use for this purpose is explained in the manual for the respective database.*

Operators

You can combine two or more search terms using Boolean operators to exclude or include specific documents. These operators are usually:

- **AND**
- **OR**
- (AND) **NOT**

The AND operator is particularly useful if, for example, all terms should be included in a title, but the order in which they appear is irrelevant.

If possible, combine this with **truncation** to also find titles that contain a variation of one of your terms.

For example: `manage* AND financ* AND sustainab*`

Use OR to find documents that contain at least one of your terms. Use this operator if, for example, you are searching for texts on a topic that is characterized by several keywords with the same meaning.

For example: `masonry OR brickwork`

Use **NOT** to exclude search terms that have a context that is not relevant to you. If you are e.g. looking for emission standards for machinery, you might come across some results about emissions banking. You can eliminate these results by excluding some terms related to the second, “unwanted” context.

Formulieren Sie: `emission* NOT bank*`

Combine operators (and truncations) to search for specific topics. If you are looking for information on organic chemistry and need to exclude organic farming, this would be your input:

Insert: `organic* AND chem* NOT farm* OR food*`

➔ *Whether operators are supported by a database and which operators you can use is explained in the manual for the respective database.*

Phrase search
If you want to search for an exact phrase, you can define it as a search phrase by enclosing it in characters, usually quotation marks.

Example: `„law of nature“`

The search query will then only return documents in which your search term appears exactly as you entered it.

This type of search can yield good results, especially when searching for a **specific author**. However, **keep in mind** that a name in the database may not necessarily be listed exactly as you would spell it. Sometimes the last name is listed first, a middle name is included or omitted, or only initials are used.

To include all spellings, you can usually **combine operators and phrase searches**.

Example: `"Jeff Smith" OR "Smith, Jeff" OR "Jeff P. Smith" OR "Smith, Jeff P." OR "J. P. Smith" OR "Jeff Patrick Smith"` etc. ...

Databases that allow a combination of phrase search and truncation make this job easier:

`"J* Smith" OR "Smith, J*"`

This, however, will also find authors named Smith whose first names happen to start with J such as John, James, Jacob etc. as well.

➔ *Whether phrase search is supported by a database and which characters you should use to enter your phrase is explained in the instructions for the respective database.*