

III. Search TSU Online Catalog for Print and Electronic Books and Other Resources

1. How to Use the TSU Online Catalog?

The access points in finding a book in the area of Robotics are **keyword, subject, author** and **title**.

Keyword Search is a primary method for searching for a topic. It allows you to search for individual words in the title, subject and other fields in the bibliographic record. This is generally the easiest type of search to do, but it also produces the largest hit list. You may limit the number of items retrieved by using operators and qualifiers discussed under **Search Commands**. You will find Keyword search in The Library' online catalog. For a successful keyword search for Robotics, you need to identify

Main Concepts- For example, "what is the impact of Robotics in automotive industry?" The main concepts can be impact, robotics, automotive and industry.

Choice of Words- You may try use those key terms that may be used to describe your main concept. For example, **impact**: impacting, influence, resulting **robotics**: robots, automation, electronic **automotive**: automobiles, designs, **industry**: manufacturing, manufacturers

Subject Search is a method of searching by using subject headings. The online catalog automatically does it for you. Subject heading describes the items and there are one or more subject headings assigned to them. The TSU Library uses Library of Congress Subject Headings. You may want to consult the Library Of Congress Subject Headings located at the Circulation Desk to make sure that you are using the correct words for a subject search. For example, if you use the subject heading **Robots**, you may retrieve a book titled "**Teaching and learning with robots**". You can look for additional books in the area of Robots by using the suggested subject headings in the record, including Robotics and Teaching-Aids and devices.

Author Search is used when you have the name of an author and would like to retrieve a list of items written by that author. For example, if you do an author search under Young, John Frederick, you will find three (3) books located in the TSU Library. They are Cybernetic Engineering, Cybernetics and Robotics. You may search the online catalog under Author Search by typing the author's last name first and first name last. If you need to find information about the author, in this case, John Frederick Young, you may do a subject research using his last name, first name.

Title Search is used when you know the title of an item. One point to remember is that if the title begins with an A, An or the, disregard them and search under the second word of the title. Do

not discard the articles in between words. Title Search works best if you are looking for a specific item and know the exact title. If you do not know the title, a Subject Search would yield better results.

Search Commands- the following commands may be used in searching most databases. Some may be titled and used somewhat differently. You may use the following search commands for a successful search:

BOOLEAN OPERATORS

AND is used when you want the records to include both search terms to narrow a search. For example, *Robotics AND Car Manufacturing. In this case you are limiting your search to only Robotics and Car Manufacturing.*

OR is used to find records in which one or both search terms appear thus broadening the search. For example, *Robotics OR Automation. In this case you are broadening your search to include Robotics and automation in general.*

NOT is used find those records that contain the first search term but not the second search term. *In this case those ning both terms are not retrieved.* For example, **Robotics NOT Automation.** *You will find articles only about Robotics. Articles with Automation will not be retrieved.*

* **Truncation** is used to retrieve variant endings of a word. For example, **Robot*** will retrieve any words starting with *Robot-Robots, etc.*

() **Parentheses** will signal priority and order. For example, **(robotics*OR automation*) AND car manufacturing*** will first find records containing words that start with **Robotics** or words that start with **Automation** or both, then those records that also mention words that start with **Car Manufacturing**.

Pound Sign represents a single character. For example, **Robot#** will retrieve robot and robots.

? **Question Mark** represents characters at the end of a search term. For example, **Robot?** may retrieve records about **Robot, Robots, Robotics** and **Automation?** may retrieve **Automation, Automated, Automating.**

SEARCH QUALIFIERS

Search Qualifiers include **author (au)**, **title (ti)**, and **subject(su)**. They will allow you to limit your search to specific fields. By using the Search Qualifiers you can speed up response time and narrow the search to the more relevant records. For example, **su robotics not manufacturing** will retrieve all records on the subject of robotics that do not contain the word manufacturing anywhere in the record. **ti robotics and Young** will retrieve all records with the word robotics in the title field and Young in the

author field

TIPS:

1. When you search the Library's Online Catalog, you should start with a keyword (Word/Phrase) search. For a successful search, find relevant subject headings and use them for your search.

For example, a Keyword search in the Library's online Catalog in the order below will retrieve 818 resources: (robots* or automation*)

2. Online Library Catalogs may differ, some of the features of the TSU Online Catalog are as follows:

- **Searching by Author, Title and Subject**
 - **Searching for keyword(s) in Author, Title and Subject**
 - **Limiting the Searches by Dates: from 1900- Language: All languages, English, French, German, Italian and Spanish**
- Material Type: All materials, books, Serials, AV materials, Music Recordings, etc.**

- **Numeric Searches by Call Number OCLC Number LC Card Number**

Reference Number

ISBN- International Standard Book Number

ISSN- International Standard Serial Number

- **Sorting your findings by Unsorted**

Author

Title

Subject

Material

Date (Ascending)

Date (Descending)

- **Help Window will assist you in properly using the Library's Online Catalog. You will find information about the System, Easy search, Numeric Search, Advanced Search, reserve Room, Local Info, Your Account and List of Topics/Links**

2. Location of Materials

On the first floor of the Brown-Daniel Library books are arranged according to the Library of Congress Classification from classification A to LD. On the third floor you will find books from classification M to Z. In addition, on this floor, you will have access to the books in the Dewey Classification, over sized books and the Youth Collection. Few journal titles are also housed on the third floor. On the second floor you will find Reference Books journals and microform collections. Reference Books are arranged on the shelves by Library of Congress classification. Journals are arranged by alphabet.

3. Library of Congress Classification System

This system is used so that each book and journal are identified by their subject, assigned an alphanumeric call number and placed on the shelves according to that number with the similar resources for easy access and browsing. Major classification headings used in the area of Engineering are as follows:

GB Physical Geography 651-2998 Hydrology. Water **Q** Science (General) 180 Operations Research 300-390 Artificial Intelligence
Information Theory **QA** Mathematics 75-76 Computer Science
801-939 Analytical Mechanics Fluid Mechanics **QC** Physics
QD Chemistry **QE** Geology **R** Medicine 856-857 Biomedical
Engineering, Electronics, Instrumentation **T** Technology
55.4-60.8 Industrial Engineering 385 Computer Graphics
TA Engineering (General) Civil Engineering 349-359 Mechanics of Engineering
Applied Mechanics 401-492 Materials of Engineering and Construction 630-820
Structural Engineering
Geotechnical Engineering 1501-1820 Applied Optics **TC** Hydraulic Engineering **TD**
Environmental Engineering **TE** Highway Engineering **TF** Railroad Engineering and
Operations
TG Bridge Engineering **TH** Building Construction **TJ** Mechanical Engineering and
Machinery 163 Power Resources Energy Conservation 210.2-225 Robotics. Control
Engineering **TK** Electrical Engineering Electronics Nuclear Engineering
5101-6720 Telecommunications

4. What is a Call Number?

As mentioned before, books and some periodicals are arranged on the shelves according to the Library of Congress Classification system. According to this system each book or periodical is assigned an alphanumeric call number based on its subject content. This specific call number identifies the item and places it on the shelves with the items on the same subject.

5. How to Read a Call Number?

Each call number has several parts. For example, the following call number

TJ
210.3
.R638
2000

gives us the following information:

The first line **TJ** defines the class or subclass. It defines the broad subject area within class **T** for Technology and **TJ** represents the the subclass Mechanical Engineering and Machinery. The second line **210.3** is the classification number. When browsing the shelves for this book, you need to read this number as a whole number with a decimal component to determine its location on the shelf. Combined with class and subclass, the classification number defines the subject

matter more precisely. In the above example, *TJ210.3* represents *Robotics* which is a subdivision of *TJ*Mechanical Engineering and machinery which in turn is in the broader subject field of *T* for Technology. The third line of the call number is called the *Cutter Number*. It is a combination of letters and numbers that usually indicates author. However, sometimes it may represent a subject division. Some items may have double cutter numbers. Always interpret the numeric part of the cutter number as a decimal number when you browse the shelves. Thus, the numeric component of *.R638* should be read as .638. Therefore, *TJ210.3 .R638 2000* should be shelved before *TJ210.3 .R7 2000*.

The year of publication of the item, in this case *2000*, may also be present. The items are shelved in chronological order which often distinguishes items by varying editions of that item. The items with the following call numbers should be on the shelves in the order below:

HF LB QP T
5382.5 1028.3 144 56.23
U5 H355 F52 H36
. C32 2001 H36 . 2001
2002 2001
2003

5. **Electronic Books**- Your library provides access to electronic books via its web page at

<http://www.tnstate.edu/library/milcat/ebooks.htm>

Currently you can read general interest electronic books via *netLibrary* or technical electronic books via *Safari*. In addition you may find electronic books via the Library's online catalog.