



Library **ENGINEERING** Resources

<http://www.library.astate.edu>

Many types of resources are available to you through the Dean B. Ellis Library. This guide is intended to help you find both print and online engineering resources. Please note: this guide is only a starting point for your research, it is not meant to be a comprehensive list of resources. If you need further assistance, please visit the Information Desk in the library.

Finding Books In The Dean B. Ellis Library

All books in the library are arranged by subject using the Library of Congress classification system for call numbers and subject headings. The call number for engineering begins with TA1. The basic breakdown is as follows:

- TA1 – TA2040 - Engineering (General), Civil Engineering
- TC1 – TC1800 - Hydraulic Engineering, Ocean Engineering
- TD1 – TD1066 - Environmental Technology, Sanitary Engineering
- TE1 – TE298 - Highway Engineering, Roads and Pavement
- TF1 – TF1620 - Railroad Engineering and Operation
- TG1 – TG470 - Bridge Engineering
- TH1 – TH9745 - Building Construction
- TJ1 – TJ1519 - Mechanical Engineering and Machinery
- TK1 – TK9971 - Electrical Engineering, Electronics, Nuclear Engineering
- TN1 – TN997 - Mining Engineering, Metallurgy

The numbers that follow these beginning letters relate to the narrower scope of the item. For example: consider the subject headings with specific book call numbers, Engineering (TA147 .M63 2008) vs. Environmental Engineering (HT166 .W513 1994). Occasionally a totally different call number will appear for an item. For the latter call number, the item is more about the urban environment and higher importance was given to this subject when the call number was assigned.

Selected Reference Books

The Reference collection is located on the second floor of the library.

Annual Book of ASTM Standards. West Conshohocken, PA: ASTM International, 2002-Present.
REF TA401 .A653 2004

Dorf, Richard C., ed. CRC Handbook of Engineering Tables. New York: CRC, 2004.
REF TA151 .C76 2004

Dorf, Richard C., ed. The Engineering Handbook. 2nd ed. Boca Raton, FL: CRC, 2005.
REF TA151 .E424 2005

Geick, Kurt and Reiner Gieck. Engineering Formulas. New York: McGraw-Hill, 2006.
REF TA151 .G4713 2006

Karwowski, Waldemar, ed. International Encyclopedia of Ergonomics and Human Factors. 2nd ed. Boca Raton, FL: CRC, 2006. **REF TA166 .I556 2006**

Keller, Harald, and Uwe Erb. Dictionary of Engineering Materials. Hoboken, NJ: John Wiley, 2004. **REF TA402 .K43 2004**

Kutz, Myer, ed. Mechanical Engineers' Handbook. 3rd ed. 4 vols. Hoboken, NJ: John Wiley & Sons, 2006. **REF TJ151 .M395 2006**

Laplante, Phillip A., ed. Comprehensive Dictionary of Electrical Engineering. Boca Raton, FL: Taylor & Francis, 2005. **REF TK9 .C575 2005**

National Electrical Code. Quincy, MA: National Fire Protection Agency, 2002. **REF TK3275 .N328**

Pfafflin, James R. and Edward Ziegler, eds. Encyclopedia of Environmental Science and Engineering. New York: Taylor & Francis, 2006. **REF TD9 .E5 2006**

Plunkett's Engineering & Research Industry Almanac. Houston: Plunkett Research Ltd., 2007. **REF TA160.4 .P58 2007**

Ricketts, Jonathan, Kent Loftin, and Frederick Merritt. Standard Handbook for Civil Engineers. New York: McGraw-Hill, 2004. **REF TA151 .S8 2004**

Stein, Erwin, Rene de Borst, and Thomas Hughes, eds. Encyclopedia of Computational Mechanics. Chichester, West Sussex: John Wiley, 2004. **REF TA350 .E53 2004**

Current Books That Can Be Checked Out

You can use the call number to browse the shelf for similar materials for engineering. These books are labeled "General Collection" in the online catalog and are located on the third, fourth, and fifth floors of the library. If the books are checked out you may place a recall or hold at the Circulation desk.

Ackerson, Linda G., ed. Literature Search Strategies for Interdisciplinary Research: A Sourcebook for Scientists and Engineers. Lanham, MD: Scarecrow, 2007. **Q180.55 .I48 L58 2007**

Addis, William. Building: 3000 Years of Design Engineering and Construction. New York: Phaidon, 2007. **TA633 .A328 2007**

Badiru, Adedeji and Olufemi Omitaomu. Computational Economic Analysis for Engineering and Industry. Boca Raton, FL: CRC, 2007. **TA177.4 .B34 2007**

Eder, W. E. and Stanislaw Hosnedl. Design Engineering: A Manual for Enhanced Creativity. Boca Raton, FL: CRC, 2008. **TA174 .E253 2008**

Fakirov, Stoyko and Debes Bhattacharyya, eds. Handbook of Engineering Biopolymers: Homopolymers, Blends and Composites. Cincinnati: Hanser, 2007. **TA455 .P58 H355 2007**

Koenig, Daniel T. Manufacturing Engineering: Principles for Optimization. New York: ASME, 2007. **TS176 .K625 2007**

Sanchez, Julio and Maria Canton. Software Solutions for Engineers and Scientists. Boca Raton, FL: CRC, 2008. **TA345 .S31535 2008**

Online Databases, Indexes & Abstracts

Some of these databases provide the full text of the articles, while others provide only citations and/or abstracts. All are accessed by clicking on the "Article Databases" link from the library homepage.

Database	Full Text	Other Information
ABI/Inform	Some	Engineering with a focus on business
Academic Search Complete	Some	Broad subject database with good focus on science and engineering
Applied Science & Tech Index	Some	Articles that are generally scholarly
Energy Citations Database	Few	Compiled by the DOE
General Science Full Text	Few	Good coverage of engineering
IOP Science	Yes	Articles are full text
JSTOR	Yes	Growing number of science journals
ScienceDirect	Few	Large access to many science topics
Science.gov	Yes	Many relevant web sites
Scirus	Few	Access to articles, websites, books
Web of Science	No	Large access to many science topics

Print Indexes & Abstracts

Indexes and abstracts will also lead you to journal and magazine articles on your topic. The printed indexes and abstracts are located in the Reference area of the library.

Physics Abstracts, 1955- (Abstract Shelves)

Available Print Journals In The Dean B. Ellis Library

Print journals from 1980 to present are located on the second floor in the tower and are shelved alphabetically by the title of the journal.

Environmental Science & Technology
 Journal of Aerospace Engineering
 Journal of Architectural Engineering
 Journal of Bridge Engineering
 Journal of Energy Engineering
 Journal of Engineering for Gas Turbines and Power
 Journal of Engineering Mechanics
 Journal of Environmental Engineering

Journal of Fluids Engineering
 Journal of Hydraulic Engineering
 Journal of Hydrologic Engineering
 Journal of Management in Engineering
 Journal of Materials in Civil Engineering
 Journal of Performance of Constructed Facilities
 Journal of Structural Engineering
 Journal of Transportation Engineering

Currently Available Online Journals

Online journals are accessed via the library's web page by clicking on "Electronic and Print Journals Catalog".

Online Journal Title	Available Through
ACM Transactions on Software Engineering and Methodology	ACM Digital Library
Automated Software Engineering	ACM Digital Library
Distributed Systems Engineering	IOP Science
Environmental Engineering Science	Mary Ann Liebert Online
Journal of Chemical and Engineering Data	American Chemical Society Web Editions
Journal of Quality in Maintenance Engineering	Emerald Journals
Modelling and Simulation in Materials Science and Engineering	IOP Science

Web Sites - Government

<http://seesar.lbl.gov/ccse/> Center for Computational Science and Engineering
<http://www.nsf.gov/sbe/srs/stats.htm> Division of Science Resources Statistics
<http://www.eeel.nist.gov/> Electronics and Electrical Engineering Laboratory
<http://www.itl.nist.gov/div898/handbook/> Engineering Statistics Handbook
http://www.ornl.gov/sci/engineering_science_technology ESTD: Oak Ridge National Laboratory
<http://www.fcc.gov/oet/> FCC: Office of Engineering and Technology
<http://www.mel.nist.gov/> Manufacturing Engineering Laboratory
<http://www.nsf.gov/home/eng/> National Science Foundation: Engineering
<http://stats.bls.gov/oco/ocos027.htm> U.S. Dept. of Labor: Occupational Outlook (Engineers)

Web Sites - Other Engineering Related

<http://www.asme.org/> American Society of Mechanical Engineers
<http://pubs.acs.org/cen/> Chemical & Engineering News
<http://www.asee.org/> Engineering Education
<http://www.ei.org/> Engineering Information
<http://www.iec.org/> International Engineering Consortium
<http://www.ietf.org/> Internet Engineering Task Force
<http://www.memagazine.org/> Mechanical Engineering Magazine Online
<http://www.nationalacademies.org/> National Academies: Engineering
<http://www.vlib.org/Engineering.html> Virtual Library: Engineering

Microforms

Microforms are located on the second floor of the library. You may make prints from the microfiche and microfilm for 10 cents per page.

United States. Congress. House. Committee on Appropriations. Subcommittee on Energy and Water Development. Energy and Water Development Appropriations for 2008: Hearings Before a Subcommittee of the Committee on Appropriations, House of Representatives, One Hundred Tenth Congress, First Session. [Microfiche]. Washington: G.P.O., 2007. **Y4.AP 6/1:EN 2/2/2008**

United States. Congress. House. Committee on Armed Services. Strategic Forces Subcommittee. Plutonium Disposition and the U.S. Mixed Oxide Fuel Fabrication Facility: Hearing Before the Strategic Forces Subcommittee of the Committee on Armed Services, House of Representatives, One Hundred Ninth Congress. [Microfiche]. Washington: G.P.O., 2007. **Y4.AR 5/2 A:2005-2006/**

Media

All media items are located in the Media Services department on the first floor of the library.

Earth Science: Winds on Our Earth. DVD. Boca Raton, FL: Allegro Productions Inc., 2005. **QC931 .E27 2005**

Smith, William Fortune and Javad Hashemi. Foundation of Materials Science and Engineering. Multimedia Materials. Boston: McGraw-Hill, 2006. **TA403 .S5955 2006**