

Ferdinand D. Bluford Library

Civil Engineering Senior Seminar Risk Management and Engineering

This guide contains a bibliography of titles and electronic resources that will assist students in locating materials for Risk Management and Engineering. This guide is general in its approach to finding materials and resources, housed in the F.D Bluford Library <http://www.library.ncat.edu>, and identifying and finding resources that may be on the Internet. It is not meant to be comprehensive. This guide is meant to help students organize their research as well as to give them tips on research strategy. Please come to the Reference Desk and talk with a Reference Librarian for assistance.

Using the Catalog

Establishing what resources F.D. Library owns on your subject should be your first priority. To do this, you must search the Library Catalog – INNOPAC - the **online public access catalog** (OPAC). The Catalog can be searched via the original, text based interface or via the web browser interface. Both versions can be accessed from the library, any campus computer lab or from off campus via remote access. The Catalog can be searched by AUTHOR, TITLE, KEYWORD, JOURNAL TITLE, and by SUBJECT HEADING. Do a keyword search if you do not know a specific title or a standardized subject heading.

These are some subject headings related to RISK MANAGEMENT: Abandoned mines-Risk assessment, Bridge failures, Building failures, Building sites-Risk assessment, Civil engineering, Construction industry-Risk management, Ecological risk assessment, Engineering ethics, Engineering inspection, Engineering law, Environmental risk assessment, Evaluation, Fire risk assessment, Harm reduction, Hazardous wastes-Risk assessment, Loss control, Management, Nuclear power plants-Risk assessment, Probability, Quality control, Risk, Risk assessment, Risk communication, Risk managers, Risk perception, Tolerance (Engineering), Water treatment plants-Risk management.

Beginning Your Research

Use encyclopedias, handbooks, or dictionaries. Overviews or definitions of your topics are presented in concise entries or articles. More in depth analysis of your topic can be obtained from the bibliographies at the end of the articles or entries. The table of contents or index should be consulted for your topic.

Bibliographies, Dictionaries, Encyclopedias, and Handbooks

Dictionaries provide brief entries that are quick and helpful sources for the definition or identification of a term, movement, or person. Handbooks and dictionaries can help you throughout your research by providing quick, factual information that you may need to support your ideas.

Encyclopedias are also a good place to start, especially if you are unfamiliar with the topic. Articles in encyclopedias are often written by recognized authorities and tend to provide established facts and ideas about the topic, its history, basic theories, and important persons who have written related articles. Also, most encyclopedia articles close with a bibliography that may help you to establish your literature search.

Dictionaries provide brief entries that are quick and helpful sources for the definition or identification of a term, movement, or person in history. While dictionaries are not as broad as encyclopedias, they are particularly useful for choosing proper terminology.

Note: When using encyclopedias, first consult the index volume, usually the last volume of the set. This will tell you if your topic has an article devoted entirely to it or if it is discussed within an article on a related subject.

Circulating books are located in different sections of the library. Please consult the “location” on the online catalog, then use the directory located at the Reference Desk and by the elevators or ask for assistance.

Accident precursor analysis and management: reducing technological risk through diligence.
netLibrary

Design guide for improving school safety in earthquakes, floods, and high winds: providing protection to people and buildings.
A&T GSM FED GOVDOCS HS 5.108:SCH 6

Effective maintenance management: risk and reliability strategies for optimizing performance.
A&T STACKS TS192 N355 2004

Energy security: managing risk in a dynamic legal and regulatory environment.
A&T STACKS HD9502 A2 E55118 2004

Engineering/technology management--2004: safety engineering and risk analysis, technology and society, engineering business management: presented at 2004 ASME International Mechanical Engineering Congress and Exposition: November 13-19, 2004, Anaheim, California, USA.
A&T STACKS TS175 E54 2004

Field demonstration of lead-based paint removal and inorganic stabilization technologies.

A&T WEB EP 11.2:2003020019

Handbook of chemical and environmental engineering calculations.
netLibrary

Knowledge-based risk management in engineering: a case study in human-computer cooperative systems.

A&T STACKS TA190 N58 1989

Reliability and risk assessment. 2nd edition.

A&T STACKS TA169 A64 2002

Ulrich's Periodicals Directory. 44th edition. 4 volumes

A&T READY REF Z6941 U5

What every engineer should know about risk engineering and management.

A&T STACKS TA169 W36 2000

NOTE: Check for recent acquisitions - from the library homepage select the links "Library Information", "Departments", then "Collection Management".

Theses/Dissertations

Master's theses and dissertations are housed on the second floor of the library in Archives/Special Collections. To access this collection use the Library Catalog for the exact author or title searches. If using keyword or subject searching, use the "Limit This Search" link, click on "Material Type" then click on "Thesis". This allows your search results to select only theses. Archives/Special Collections hours and staff are listed on the url: <http://library.ncat.edu/info/archives/archives.html>.

Electronic Book Collections

AccessScience [McGraw-Hill Encyclopedia of Science & Technology Online]

- topics include civil engineering and architecture and engineering materials such as alloys and composites.

ASM Materials Information

- ASM Handbooks Online

- twenty ASM books covering topics such as corrosion, distortion, fatigue and fracture and failure analysis.

- ASM Alloy Center Online

- collection comprising over 2500 micrographs areas concentrating on alloys [data sheets and diagrams, alloy finder, materials property data, coatings data, and corrosion data].

- ASM Micrograph Center Online

- over 2500 micrographs focusing on industrial alloys such as ceramics and ferrous, nonferrous alloys and polymers.

- ASM Failure Analysis Center Online

- over 1000 failure analysis case histories and **Failure Analysis and Prevention** [volume 11 **ASM Handbook**].

ENGnetBASE

- books, produced by the Chemical Rubber Company [CRC], covering areas such as civil engineering.

ENVIROnetBASE

- books, produced by the Chemical Rubber Company, covering environmental areas such as ecology, environmental law, and resource management and sustainability.

Knovel

- books on environment and environmental engineering.

MATERIALSnetBASE

- 75 books covering wide area of engineering, includes civil engineering.

MATHnetBASE

- books primarily in various areas of mathematics; includes book chapters covering civil engineering, energy and environment.

NANOnetBASE

- books focusing on electrical, lasers and optical, mechanical and nanotechnology engineering.

netLibrary

- over 42,000 books in the three disciplines: humanities, social sciences, and sciences.

POLYMERSnetBASE

- books concentrating on polymers.

Referex

- over 300 books focusing on materials and mechanical; electronics and electrical and chemical, petrochemical and processes.

Wiley InterScience Online Books

- engineering, science, and technology books; includes as separate collection of reference titles.

Research Databases/Vendors

Electronic databases are accessible through the library's web page. Most databases have downloading, e-mailing and printing functions. Most of the databases and vendors furnish detailed help links for search date inclusion, material and subject coverage, and search strategies. This is a listing of databases/vendors to begin with:

AccuNet/AP Multimedia Archive

- provides primary photographic sources beginning in the 1840's to the present.

ArtStor

- database providing access to outstanding international museum collections.

ASCE Publications Civil Engineering Database

- database providing full text access to journals produced by the American Society of Civil Engineers; bibliographic citations to conference proceedings, books, standards, manuals, magazines and newspapers. Subject areas include aerospace, architectural engineering, bridges, cold regions, computer practices, construction, earthquake engineering, education, engineering mechanics, education, engineering mechanics, environmental engineering, forensic engineering, geotechnical engineering, geomechanics, highways, hydrology, hydraulics, irrigation and drainage, management, materials engineering, structural engineering, transportation, urban planning, water resources, waterway, port, coastal and ocean engineering.

Cambridge Scientific Abstracts

- NOTE: **"Logout"** all CSA databases.

- Agricultural and Environmental Biotechnology Abstracts

- CSA bibliographic database focusing on animals and plants covering their relationship in agriculture, the environment and the food industry; also includes patents and plant genome studies.

- ASFA 3: Aquatic Pollution and Environmental Quality

- CSA primary bibliographic database of books, journal literature, and conference proceedings focusing on aquatic resources, conservation and policy and legislation.

- BioEngineering Abstracts

- CSA bibliographic database of journal and conference proceeding literature focusing on biological and medical applications in engineering.

- Biotechnology and Bioengineering Abstracts

- CSA bibliographic database focusing on bioengineering and biotechnology research, application, regulatory developments and recent patents.

- CSA Engineering Research Database

- bibliographic database concentrating in civil, earthquake, environmental, mechanical and transportation engineering as well as forensic, management and marketing of engineering services, engineering education, theoretical mechanics and dynamics, and mathematics/computation. Database content covers basic and applied research, design, construction, technological and engineering aspects of air and water quality, environmental safety, energy production and developments in new technologies.
- NOTE: Also use: **ANTE: Abstracts in New Technology and Engineering Mechanical & Transportation Engineering Abstracts**

- Conference Papers Index

- CSA global database focusing on papers as well as poster sessions in aquatic, environmental and life sciences and engineering, materials science and physics.

- Ecology Abstracts

- CSA global database focusing on plant and animal life in relation to the environment.

- EIS: Digests of Environmental Impact Statements

- CSA database focusing on United States environmental impact statements

- Environmental Engineering Abstracts

- CSA global database focusing on air and water quality, energy production and environmental safety.

- Environmental Science and Pollution Management

- CSA bibliographic database covering the environmental sciences. Includes: agricultural biotechnology, air quality, aquatic pollution, bacteriology, ecology, energy resources, environmental biotechnology, engineering and domestic impact statements, hazardous waste, industrial hygiene, microbiology related to industrial and environmental issues, pollution, risk assessment, safety science, toxicology and toxic emissions, and water pollution, management and resource issues.

GeoScienceWorld Full-Text

- CSA database covering global geoscientific research from 1933 and North American coverage since 1693.
- NOTE: Also refer to **GeoRef**

- Health and Safety Science Abstracts

- CSA database covering public health, industrial hygiene and safety.

- METADEX

- CSA database focusing on applications, development manufacturing and properties of alloys and metals found in conference proceedings, journals and technical reports.

- MicroPatent Materials Patents

- CSA database providing European, Patent Cooperation Treaty and United States patents focusing on such areas as aerospace and automotive materials and applications alloy development and engineering ceramics and polymers.

- Safety Science and Risk

- CSA database includes research on biological and environmental risks, engineering design, natural hazards and risk research.

Dissertation Abstracts Online

- database focusing on dissertations; can be searched by author, title or subject; includes full citation with abstract.
- NOTE: Some dissertations are available full-text through this database.

Ei Engineering Village 2

- Compendix

- enormous engineering research database providing journal citations and abstracts with some links to full-text, conferences and technical reports. Major areas covered include: aerospace and automotive engineering, agricultural engineering and food technology, applied physics, bioengineering, chemical and process engineering, civil, computers and data processing, control, electronics and communications, light and optical technology, materials, mechanics, nuclear technology, petroleum, and transportation.

- Inspec

- bibliographic database to conference proceedings and scientific and technical serials in the areas of communications, computers, computing, control engineering, electrical engineering, electronics, information technology, manufacturing and production engineering and physics.

- NTIS

- The United States Department of Commerce's National Technical Information Services database accessing unclassified reports from domestic and foreign government agencies including the Department of Energy. Additionally, audiovisual aids for fire services, foreign languages, law enforcement and workplace safety and health.

Emerald Full-Text

- full text database focusing on applied science, engineering, global management, and technology.

Faulkner Advisory for Information Technology Studies

- concentrates on technology; includes some standards.

GaleNet Databases

- Biography Resource Center

- in addition to basic biographical information, this database usually includes a bibliography of further readings.

GeoScienceWorld

- international database focusing on geology with some engineering/environmental; remediation coverage.
- NOTE: use with **GeoRef**

ILI Infobase

- international database providing bibliographic information on superseded and current engineering standards and specifications

Ingenta

- enormous bibliographic database for academic and professional research. Use the “Browse Publications” link; select “Subject Area” to limit searching under “Earth and Environmental Sciences” which covers ecology, geography, geology, geophysics and geomagnetism, meteorology and climatology and oceanography and “Engineering/Technology” covering biotechnology, chemical engineering, construction, electrical and nuclear engineering, ergonomic, general and civil engineering, hydraulic and environmental engineering, industrial engineering, materials and manufacturing, mechanical engineering, mining and metallurgy, technology and transportation.

LexisNexis Academic

- full text bibliographic access to information in business, environmental, legal research, medical, statistical and United States history.

LexisNexis Environmental

- includes journals, case law and agency actions, conference and proceedings papers, government case law and agency actions, codes and agency regulations, and waste site data and hazardous materials information.

MAD/CAD

- database providing information on meeting codes, building codes and standards such as ADA, ANSI, BOCA, NFPA and knowledge-based design solutions.
- NOTE: one user for this database; please “**logoff**”.

Project Muse

- full-text database focusing on journal literature in the arts and humanities and

the social sciences; energy and environmental coverage from the former perspectives.

SAE Digital Library

- The Society of Automotive Engineers database covers SAE standards for: aerospace, aerospace material specifications and ground vehicles and technical reports for the areas of mobility engineering including aerospace, ground vehicle, manufacturing and off-highway technology.

Science Direct

- extensive full-text and bibliographic database in the three disciplines: arts and humanities, sciences and social sciences. Initially choose the subject area links “Energy” covering energy engineering and power technology, fuel technology, nuclear energy and engineering, renewable energy, sustainability and the environment; “Engineering” covering aerospace, automotive, biomedical, civil and structural, control and systems, electrical and electronic, industrial and manufacturing, mechanical and ocean engineering, computational mechanics, safety, risk, reliability and quality; and “Environmental Science” covering ecological modelling, ecology, environmental chemistry, environmental engineering, environmental science, global and planetary change, health, toxicology and mutagenesis, management, monitoring, policy and law, nature and landscape conservation, pollution, waste management and disposal, and water science and technology to access journal articles. Each subject link includes “25 Hottest Topics”.
- NOTE: This database will indicate journal articles “in-process” and articles which have been withdrawn.

Thomas Register Online

- product database which includes *CADBlocks* for building product drawings and technical data.

Web of Science

- excellent bibliographic database for tracing publication citations.

- Arts & Humanities Citation Index

- Science Citation Index

- Social Sciences Citation Index

Wilson Web

- NOTE: use limiting features for peer review, full image and full-text results.

- Applied Science & Technology Full-Text

- full-text database focusing on applied science and technology.

- Biological & Agricultural Full-Text

- full text database covering agriculture and biology.

- **General Science Full-Text**

- full text database focusing on the sciences.

- **Legal**

- full-text database covering legal information.

WorldCat

- massive global print and audiovisual bibliographic database; providing links to library holdings; use advance link to limit results.

Others

National Council for Science and the Environment

- **E&ETV** <http://www.eande.tv/getFlash.html>

E&E Daily

Greenwire

Land Letter

daily webcast focusing on energy and environmental policy

General Vendors/Databases

- **CollegeSource Online** [college and university course catalogs].
- **Jstor** [archival journal database for the humanities, sciences and social sciences].
- **Lexis-Nexis Academic** [database includes environmental and legal topics].
- **NCLIVE/EbscoHost** [limit search to peer reviewed, scholarly, referred journals].
- **ReferenceUSA** [United States business and residential directory].

Interlibrary Loan [requesting materials not held at Bluford Library]

- ✓ **Full citation**
- ✓ **Verification source**
- ✓ **OCLC, ISBN, ISSN**

Government Documents

Government Documents cover a broad range of topics including criminal justice; laws and regulations; congressional hearings; Supreme Court opinions; and economic, demographic and agricultural statistics. You can access the Government Documents Collection several ways: “Library Catalog” using the limiting feature “Where located”; the “Library Information” link to “Departments”, then “Government Documents” link; and the Internet. These items are classified by the Superintendent of Documents Classification Scheme and must be retrieved using that call number. The library's Government Documents Department is located on the lower level of the library and the url is <http://www.library.ncat.edu/info/govdocs/govdocs.html>.

Government Databases

- **Dictionary of Occupational Titles**
See: **DOT revised Dictionary of occupational titles 2005: the first full revision in 28 years, and with ERI's Assessor series, the Dot becomes eDOT.**
A&T REF COMPUTER FILES HB2595 O16 2005
- **GPO Access**
 - Government Printing Office database for federal documents.
- **GrayLIT Network**
 - database focusing on government literature usually not accessible through traditional publication channels; materials from the Defense Technical Information Center, Department of Energy, Environmental Protection Agency and National Aeronautics and Space Administration.
- **Occupational Outlook Handbook**
 - excellent source for career information; includes education and training, earnings and employment prospects, responsibilities and working conditions.
- **Science.gov**
 - massive scientific and technical government database covering such areas as applied science and technology and environment and environmental quality.
- **TRIS** [Transportation Research Information Services]
 - massive transportation database focusing on materials primarily from the Bureau of Transportation Statistics and the Transportation Research Board; some full-text.
- **US Patents**
 - enormous bibliographic United States patent database from 1975, patent chronology; includes the **U.S. Patent Manual of Classification**.
- **USPTO Web Patent Databases**
 - two-part database comprising published patent applications since March 15, 2001 and issued patents with full images since 1790 and full text since 1976.

Citing/Plugarism

- **WriteNote®**
- **Retracted Research**
- Plugarism site: <http://www.ncat.edu/~acdaffrs/academicdishonestypolicy.htm>.

Organizations and Websites

Below is a web list of organizations associated with Engineering:

American Academy Of Environmental Engineers [AAEE]

<http://www.aee.net>

American Association Of Engineering Societies [AAES]

<http://www.aes.org>

American Consulting Engineers Council [ACEC]

<http://www.acec.org>

American Engineering Association [AEA]

<http://www.aea.org>

American Indian Science And Engineering Society [AISES]

<http://www.aises.org>

American Institute Of Engineers [AIE]

<http://www.members-aie.org>

American Society Of Civil Engineers [ASCE]

<http://www.asce.org>

Asociacion De Ingenieros Cubanos

<http://www.a-i-c.org>

Association Of Muslim Scientists And Engineers [AMSE]

<http://www.amse.net>

Environmental Assessment Association (EAA)

<http://www.iami.org/ea.html>

Environmental Defense

<http://www.environmentaldefense.org> 0

International Association for Continuing Engineering Education (IACEE)

<http://www.iacee.org>

National Academy Of Engineering [NAE] *good site for women engineers

<http://www.nae.edu>

National Council Of Structural Engineers Associations

<http://www.ncsea.com>

National Society Of Black Engineers [NABE]

<http://www.nsbe.org>

National Society Of Professional Engineers [NSPE]

<http://www.nspe.org>

Society Of Engineering Science [SES]

<http://www.sesinc.org>

Society Of Hispanic Professional Engineers [SHPE]

<http://www.shpe.org>

Society Of Mexican American Engineers And Scientists [MAES]

<http://www.maes-natl.org>

Society Of Women Engineers [SWE]

<http://www.swe.org>

Assistance

- Alerting Services
<http://www.library.ncat.edu/ref/alerting/index.htm>
- Ask-A-Librarian
<http://www.library.ncat.edu/services/askalib.html>
- Individualized Instruction/Research Consultation
- Interlibrary Loan/Document Delivery
- Remote Access
- 24/7 Virtual Reference Service
<http://www.library.ncat.edu/services/247vrs.html>
- University of North Carolina System and AggieONEcard
- WriteNote®

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J. McGirt

Bibliographer for Architectural, Civil, Agricultural and Environmental Engineering

Civil Engineering Seminar **NOTES:**