Western Libraries
Collections Management Policy
Chemical and Biochemical Engineering

Date created: March 31, 2003 (David Fiander)
Revised: May 31, 2012 (Shiyi Xie)

Subject Librarian: Shiyi Xie, Allyn & Betty Taylor Library
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Purpose of the Collection:

The chemical and biochemical engineering collection of Western Libraries is intended to support the research activities of faculty, students and staff, and the instructional requirements of undergraduate and graduate programs. The collection also provides support for teaching and research in related fields such as the other engineering departments and the sciences.

The Allyn & Betty Taylor Library is the primary location for print holdings supporting the research and instructional needs of the Chemical and Biochemical Engineering department. A significant number of holdings for chemical and biochemical engineering are digital, making them available anywhere, anytime, due to Western Libraries’ strategic priority to acquire and provide access to information in digital formats.

Program Information:

Undergraduate Programs

Chemical and Biochemical Engineering Program with two options:
• General Chemical Engineering
  ♦ Dual degrees with applied mathematics, business, computer science or law also offered
• Biochemical and Environmental Engineering
  ♦ Dual degrees with biology, computer science, environmental science or medical biophysics also offered
  ♦ Biochemical engineering with medicine

Green Process Engineering Program with three options:
• Green Process Engineering (4 years)
• Green Process Engineering with Management (5 years)
• Green Process Engineering with Law (6 years)

Graduate Programs

• Accelerated Masters Program
• Master of Engineering Science (MESc)
• Master of Engineering (MEng)
• Doctor of Philosophy (PhD)

Research Areas

Research areas of focus within the Chemical and Biochemical Engineering Department are:
  - Biomaterials and Biochemical Engineering
  - Environmental and Green Engineering
  - Particle Technologies and Fluidization
  - Polymer and Nano-Engineering
  - Reaction and Process Systems Engineering

Subject Areas Covered:

1. Library of Congress Subject Areas for Chemical engineering:

   Chemical engineering
     - Environmental chemistry. Green chemistry.
     - Crystallization
     - Polymerization
   Apparatus and supplies
   Data processing
   Chemicals
     - Special inorganic chemicals
     - Organic chemicals and preparations
   Biotechnology
     - Nanotechnology
     - Special biotechnologies
     - Biochemical engineering, Bioprocess engineering.
     - Genetic engineering applications
     - Biotechnological production, modification, and application
   Industrial radiochemistry. Industrial radiation chemistry
   Industrial electrochemistry
   Water in chemical industry
   Fuel
     - Coal
     - Biomass
     - Gas
     - Natural gas
     - Coal liquefaction
     - Petroleum
     - Alcohol and alcohol mixtures. Gasohol
     - Biodiesel fuels
     - Biogas
     - Hydrogen
Oils, fats, and waxes
  Vegetable oils and fats
  Mineral oils and waxes
  Petroleum refining. Petroleum products
Gas industry
  Coal, oil, shale, and other resources for gas manufacture
  Gasification of coal and oil
Ceramics. Glass.
  Cement
  Polymers and polymer manufacture

2. The following subject areas are either interdisciplinary or not well represented by the list above and are also covered:

Analytical techniques
Bioelectronics
Biomaterials
Biomedical engineering
Biomechanics
Biophysics
Bioreactor design
Bioremediation
Biosensors
Chemical reactors
Clean technology
Crystallography
Drug delivery systems and devices
Fluidized beds
Medical imaging
Nanomaterials
Particle or powder technology
Pharmaceutical technology
Photocatalytic reactors
Tissue engineering
Therapeutics

3. General engineering subject areas:

Disasters and engineering
Engineering communications
Engineering design
Engineering economy
Engineering ethics
Engineering graphics
Engineering mathematics & analysis
Industrial research
Industrial safety
Project management in engineering
Risk assessment in engineering
Technological innovations

Format:

Acquisitions will include monographs, book series, and journals. Resources, particularly journals and books, in digital format are preferentially selected over their print counterparts. Alternate formats, such as CD-ROM, video, DVD, and microform, are considered on an individual request basis.

Language:

English is the primary language of collection. Materials in other languages may be acquired to support the curriculum. English translations of major works in other languages are also acquired.

Source of Publication:

Sources of publication are primarily Canada, the United States, the United Kingdom, and Western Europe. Material published in other regions may be considered on request and will be evaluated for quality and relevance.

Date of publication:

Materials with a recent imprint date are preferred. Older material will be considered upon request.

Exclusions:

With the exception of individual requests and some selective acquisitions, the following types of material are not acquired:

- Popular literature
- Conference proceedings
- Theses or dissertations from other institutions (unavailable in ProQuest Dissertations & Theses Database)
- Course textbooks

Related collections and cooperation:

The Western Libraries collection for chemical and biochemical engineering is supplemented by collections in related fields, such as chemistry, biochemistry, environmental sciences, environmental engineering, biological sciences, earth sciences, pharmacology, mathematics, and other engineering collections.
Engineering standards from various governmental bodies and organizations are selectively collected to support undergraduate and graduate course instruction, thesis research at the MESc and PhD levels, and faculty research.

Gifts:

The library gratefully accepts gifts of materials in good condition. As considerable expense is incurred by Western Libraries in the receipt and processing, the library only accepts gifts of materials which support current teaching and research needs, or which are not adequately represented in the collection. Due to space constraints titles already in the collection will not be considered. Only materials published within the last five years will be considered for acceptance in order to keep the collection current with developments in the chemical and biochemical engineering subject area.

Managing the Collection:

In order to ensure that collections remain optimally useful for our patrons, it is necessary to analyze collection usage and available space regularly. Items will need to be selectively removed from the onsite collection from time to time.

Duplicate items that are no longer required to support the curriculum, and damaged items that can no longer be replaced, may be removed from the collection at the discretion of the Subject Librarian.

Items that are unique to Western may be transferred to a storage facility. Materials housed in these storage facilities are available by request through the Library Catalogue.

Criteria for transfer selection include, but are not limited to, the following:

1) Outdated or previous editions of titles
2) Medium- to low-use items
3) Material that is available in alternate formats, i.e., online
4) Materials that would benefit from storage in a more controlled environment.

Consult the Subject Librarian for further details about these criteria.

Resources to aid in acquisition of material:

- Profile developed in collaboration with Coutts Information Services (book vendor) to capture publications that match relevant Library of Congress Subject Headings and other subject areas of interest
- Websites of society publishers
- Catalogues from major publishers
- Direct requests from library patrons