

Departmental Policy Statement: Biomedical Engineering

Herff College of Engineering

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Curriculum

The Biomedical Engineering curriculum at The University of Memphis is based on a solid foundation of life sciences, mathematics, physical sciences and engineering principles. Basic requirements in physics, chemistry, biology, and other areas of engineering are met by the collections supporting the respective departments. The biomedical engineering collection needs materials at the advanced study level on artificial organ research, bioengineering, biofluid dynamics, biological physics, biological signal processing, biological transport phenomena, biomechanics, biomaterials, biomedical computing, biomedical imaging, biomedical instrumentation, biometry, biorheology, biosensors, cardiovascular research, electrocardiology, and hemodynamics,

Purpose and Scope of the Collection

Library support for the biomedical engineering department needs to encompass the interdisciplinary nature of its teaching and research programs.

Cooperative Agreements

None specified.

Geographical Coverage

Not applicable.

Period Coverage/Date of Publication Range

The emphasis is on collection current materials, mainly those published after 1990. An attempt is made to fill in gaps in the holdings of publications issued by professional associations. Selected reprints of classical works in the field are collected; many requests for older materials are satisfied through ILL, but if the demand is of a continuing nature the material is considered for acquisition.

Languages

Although English is the primary language, materials in other languages are also acquired on a selective basis. If at all possible, translations into English are preferred, especially for those materials that are in Russian, Japanese, and Chinese.

Types of Materials

Monographs:

Individual titles as well as numbered monographic series are purchased. Textbooks are acquired minimally, especially at the lower division level. Textbooks are not normally purchased. Exceptions are those which have earned a reputation as "classics" in their fields, or which are the only or best sources of information on a particular topic.

Serials:

Both domestic and international serials are purchased. The emphasis is on core journals to satisfy curricular interests.

Proceedings/Transactions:

Major publications of international associations, societies, and other learned institutes are acquired.

Reference Materials:

These are a high priority in acquisition and include major abstracts and indexes (electronic and print), dictionaries in subject fields, encyclopedic works, handbooks, and biographical data

Electronic Formats:

In addition to the criteria used for judging print materials (authority, content, etc.), other factors are considered in the acquisition of electronic resources. These include:

- Method of access: non-proprietary protocols such as the World Wide Web and document formats such as HTML and PDF are preferred
- Availability: access to the entire campus is preferred to library-only access
- Licensing requirements
- Availability of archives

For secondary literature, campus wide electronic access is desirable where available and affordable followed by print access and mediated online searching where necessary.

Exclusions:

Popular books, industrial house organs, equipment/vendor catalogs, and reprints from journals.

Subject Areas by LC Classification

QC221 - QC246	Acoustics
QD415 - QD436	Biochemistry
QH301 - QH705.5	Biology (General)
QH505	Biophysics
QH513	Biomechanics
QM1 - QM695	Human anatomy
QP1 - QP911	Physiology
R5 - R920	Medicine (general)
R421 - R790.95	Public health; Hygiene
R855 - R855.5	Medical technology
R856 - R857	Biomedical engineering
R585 - R859.7	Medical informatics
RA1 - RA1270	Public aspects of medicine
RA407 - RA418.5	Medical economics
RC952 - RC1245	Industrial medicine, transportation
RD1 - RD811	Surgery
RS1 - RS441	Pharmacy
T57 - T57.97	Applied mathematics
TA164	Bioengineering
TA165	Engineering instruments
TA166 - TA167	Human engineering
TA168	Systems engineering
TA329 - TA348	Engineering mathematics
TA365 - TA367	Acoustics in engineering
TP248.13 - TP248.65	Biotechnology

Related Areas of Collection

Biology	Chemistry	Mathematics	Physics
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