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Computer Science Collection Development Policy

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Computer Science Collection Development Policy
University Libraries, University of Nebraska-Lincoln
Jolie Graybill, Mathematics Liaison Librarian, December 2009
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I. GENERAL ACADEMIC PROGRAM INFORMATION

The computer science collection supports the teaching, research, and service activities of the entire university community; although its primary audience is the faculty, staff, and students of the Department of Computer Science and Engineering, and secondary audience is the faculty, staff, and students in Computer Science. Its primary focus is support for the undergraduate and graduate curricula for computer science; its secondary focus is support for research and teaching in engineering. Specific and transient research needs of computer science faculty and graduate students should be supplemented through Interlibrary Loan. Materials are not purchased for the general public, though they may benefit from the collection. While the collection focuses on works classified in Mathematics (QA), curriculum and research support is also provided by works classified as belonging to, for example, Statistics (HA), and Engineering and Technology (T-TA).

The bulk of the Computer Science collection is housed in the Math Library in Avery Hall. Additional titles, depending upon the cross-discipline use, may be housed in the Engineering Library or Love Library.

The Department of Computer Science offers the B.S., thesis and non-thesis option M.S., and Ph.D. degrees.

There is considerable overlap with several other departments. Many computer science courses are cross-listed with engineering mechanics, electrical engineering, mathematics, statistics, or management. Ph.D.’s are offered in conjunction with the Department of Mathematics and under the unified engineering doctoral program.

Service courses, i.e., computer science courses for non-computer scientists makeup nearly one-third of the credit hours generated by the department. Although many of these courses are for undergraduates, computer science classes are required for completion of research tool requirements by nearly all graduate majors. This group requires basic texts and introductory materials and discipline specific materials such as statistical packages and hardware and software reviews not needed by the major.

Graduate coursework covers hardware (logic design, integrated circuitry structures); software (programming and operating systems); computer systems organization (processor architecture, networks); data (structure, storage, coding and theory); information systems; computing methodologies; and computer applications.

Current research emphases are design automation, VLSI, artificial intelligence, information storage and retrieval, bioinformatics, software engineering, intellectual property management, and algorithms.

The Department as an integral part of the Academic Computing Resource Center is on CSnet, and has access to Plato. The IANR Biometrics and Information Systems Center activities overlap with many of the support functions of the department.
No accrediting body exists for computer science. The original program was based on the ACM 1968 curriculum standards. Curricula changes have paralleled ACM standards changes and developments in the field.

II. GEOGRAPHICAL COVERAGE
There are no geographical limitations.

III. CHRONOLOGICAL COVERAGE
There are no limitations to chronological coverage.

IV. IMPRINT DATE
Emphasis is on current imprints. The only exception is in the acquisition of subject specific microformat collections, e.g., EIC cad/cam file.

V. FORMAT/TYPE AND LEVEL OF MATERIALS

Print Materials
Most materials are acquired in the form of journals and monographic series, conference proceedings and research reports. Pre-prints and computing laboratory reports are purchased when available. Books authored by one, or possibly two authors are preferred in print.

Non-Print Materials
With respect to periodicals/series and to reference works, preference should be given to materials available online or in dual print/online format, especially if such materials are free of continuing “maintenance” fees and if such materials allow for simultaneous access. Micro-format collections, especially microfiche, are rarely collected; if funding allows, preference should be given to affordable online versions of such collections, especially if they offer value-added features such as full-text searching. Books edited with each chapter written by different authors are preferred in electronic format.

VI. LANGUAGES
English is the primary language of communication in the discipline.

VII. SPECIAL FACTORS
The following associations should be comprehensively collected: ACM, IEEE, and AFIPS. The primary computer science collection is housed in Love Library. The Mathematics and Engineering libraries also contain important collections.

VIII. CLASSIFICATION AND INTENSITY LISTING

Q 295 Cybernetics RESEARCH
Q 327 Pattern recognition RESEARCH
QA 75 Calculating machines RESEARCH
QA 76 Computer science (General) RESEARCH
QA 76.4 Analog computers RESEARCH
QA 76.5 Digital computers RESEARCH
QA 76.73 Programming languages RESEARCH
QA 76.8 Special computers by name STUDY
QA 76.9 Databases, distributed systems RESEARCH
T 57.62 Industrial engineering RESEARCH