Subject: Computer Science

Subject Librarian Liaison: Edward Kownslar

Section I: Program Descriptions

Description of Undergraduate Program: “The computer science degree program is applied in nature and is designed to prepare students to begin or advance computing careers in business, industry, government, or education, or to pursue further study in computer science. The curriculum is thorough, current, and oriented toward the technical competencies required of a modern computer professional with emphasis on the development, evaluation, and integration of software systems.” (Source: 2010-2011 Undergraduate Catalog)

Tracks Offered for Undergraduate Major: (1) Computer Information Systems; (2) Systems Programming; (3) Computer Game Programming; and (4) Computer Science Education.

Undergraduate Catalog Course Listings for Computer Science: The course listings are available in the University’s Undergraduate Catalog, which is available at: http://www.tamucc.edu/academics/index.html

Description of Graduate Program: “The Master of Science with a major in Computer Science is designed to prepare graduate professionals who can apply the necessary knowledge of computing to information requirements of organizations in business, government, industry and education. The program provides for the education of individuals who will develop, maintain, or manage complex computer-based information systems.

The program provides the experienced professional with up-to-date specialized knowledge while developing those analytical skills necessary to stay abreast of the changing field of computing. The program also provides the recent baccalaureate graduate with additional applied and advanced knowledge, thus facilitating a more useful contribution to his/her career path.” (Source: 2010-2011 Graduate Catalog)

Tracks Offered for Graduate Major: (1) Software and Programming; (2) Scientific Computing and Visualization; (3) Networking and Security. [Note: There is a separate collection development policy for Geographic Information Science, and GIS will not be included in this policy.]
Graduate Catalog Course Listings for Computer Science: The course listings are available in the University’s Graduate Catalog, which is available at: http://www.tamucc.edu/academics/index.html

Section II: Collection Levels

The designated collection levels will provide the appropriate support for the University’s academic programs. These levels are ideal collection targets and are dependent on funding.

The library adheres to library collection standards set by the State Higher Education Coordinating Board (http://www.thecb.state.tx.us/), the Southern Association of Colleges and Schools (http://www.sacs.org/), and other accreditation agencies.

<table>
<thead>
<tr>
<th>Subjects</th>
<th>LC Call Number Range</th>
<th>Collection Level</th>
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<tbody>
<tr>
<td>Systems Theory, Cybernetics</td>
<td>Q 295 – Q 390</td>
<td>4</td>
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<tr>
<td>(Operations Research, Bionics, Perception Theory, Artificial Intelligence, Information Theory)</td>
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<tr>
<td>General Computer Science</td>
<td>QA 75 – QA 76.95</td>
<td>3</td>
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<tr>
<td>(Systems, Data Processing, Teaching, Student Learning, Laboratories, Specific Systems, Programming, Software, Hardware, Standards, Generations, Networks, Database, Data Management, Security)</td>
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<tr>
<td>Machine Theory</td>
<td>QA 267 – QA 268.5</td>
<td>3</td>
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<tr>
<td>(Types of Machines, Computational Complexity, Coding Theory, Switching Theory)</td>
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<tr>
<td>Systems Analysis</td>
<td>QA 402</td>
<td>4</td>
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<tr>
<td>Harmonics</td>
<td>QA 403 – QA 411</td>
<td>2</td>
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<tr>
<td>(Fourier Analysis, Potential Theory, Spherical Harmonics, Cylindrical Harmonics, Toroidal</td>
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Harmonics)

Engineering Technology  
[See Engineering Technology  
Collection Development Policy]

Computer Graphics  

Optical Digital Processing  

Telecommunications  

Data Transmission Systems  
(Wireless Systems, Picture  
Transmission Systems, Switching  
and Packet Systems, Networks,  
Internet, Web Authoring Software,  
Communication Software)

Computer Engineering  
(Hardware Design  
and Construction)

Computer Engineering, Equipment  
Maintenance and Repairs,  
Specific Computer Components

Section III: Preferred Collection Formats and Languages

Preferred Collection Format(s):  (1) Electronic for periodicals and indexes; (2) Print for monographs.

Lower-Priority Collection Formats:  Microform

Language:  English is the language of collection.

Section IV: Noteworthy Publishers:

1. Wiley  (www.wiley.com)

2. IEEE  (www.ieee.org/onlinelpubs)
3. Springer  ([www.springer.com](http://www.springer.com))

4. Elsevier  ([www.elsevier.com](http://www.elsevier.com))

5. Thomson  ([www.gale.com](http://www.gale.com) and [www.scientific.thomson.com](http://www.scientific.thomson.com))


**Section V: Specialized Lists/Bibliographies in this Subject Area:**

1. Choice

2. Collection of Computer Science Bibliographies:  
   [http://liinwww.ira.uka.de/bibliography/index.html](http://liinwww.ira.uka.de/bibliography/index.html)

3. Book reviews in subject-specific journals and in specialized databases (Science Direct, SpringerLink, Wiley Interscience, IEEE Online)

4. Catalogs from specialized publishers

**Section VI: Weeding Policy**  
(INCLUDING FREQUENCY OF COLLECTION ASSESSMENT):

Due to the changing nature of the field, the collections for computer science (in the Main and Reference collections) will be examined, and weeded, every three years.

Weeding criteria include (1) Currency and relevance of material to the curriculum; (2) Updated/revised editions; and (3) Physical condition of the title (please see the “Weeding” section of the General Collection Development Policy).

**Section VII: Gift Policy:**

The library will accept donations of materials (monographs, periodicals, etc.) in this subject area. All donors are encouraged to fill out, and sign, a form with the Technical Services Department when the library accepts those materials. If the donor allows the library to keep all donated materials, then the library has the discretion about whether to integrate those materials into the collections or use them in another capacity, such as: (1) Donating those titles to another library; (2) Including them in the annual book sale; or (3) Recycling the materials if no other parties or organizations can use the materials.
However, the donor can also specify on the form that they would like all donated materials returned to them if the library cannot add those materials to the collections.

The library will add gift books to the collections only if they support the curriculum and student research in computer science. For computer science, the library will generally not include in its collections the more popular computer titles and series (such as “…for Dummies”), as well as instruction books on how to use particular software programs and programming languages.

The Library will generally add print periodical titles to its collections under the following conditions: (1) The library already has a current subscription to that title; (2) The library has determined that there is adequate room for older print volumes of that title; (3) The library does not own those titles but they fit the subject’s selection criteria.

Revised:
September 29, 2010, by E. Kownslar

Approved by the Library Director:
August 1, 2007.