

2014 ABET Self-Study (CEE, ChE, ECE, ME)

E. Library Services

Describe and evaluate the capability of the library (or libraries) to serve the program including the adequacy of the library's technical collection relative to the needs of the program and the faculty, the adequacy of the process by which faculty may request the library to order books or subscriptions, the library's systems for locating and obtaining electronic information, and any other library services relevant to the needs of the program.

The Angelo & Jennette Volpe Library is committed to the missions of the University by providing the collections, services and environments that lead to intellectual discovery. The Library's vision is to be an approachable, accessible organization that is sensitive to the needs of all users while providing a positive learning experience and fostering excitement in the process of discovery. To accomplish this, the Library is a service-oriented organization staffed by avid learners who evaluate and organize information, provide instruction, and fulfill the information needs of the Tennessee Tech University community without regard to space or time.

In fall 2011, the Volpe Library remodeled the main floor into a Learning Commons, which provides more technology for students, more student group study areas, other learning spaces, and a variety of seating and tables. The focus of collecting and managing library resources, including books, journals, and databases, to support students and faculty needs has shifted to online electronic as more resources are going digital. Electronic resource collections contribute to the Library's mission of promoting learning, discovery, and the advancement of knowledge. Electronic resources are generally preferred due to their ease of access, either remote or via library computers, ease of searching, and ease of printing. The building is open over 95 hours per week during the fall and spring semesters.

The Library building has 105,172 ft.² of assignable space containing a total of over 2,020,000 items of materials in various formats. There are approximately 275,000 books and e-books (over 20,000 are in the engineering discipline), 91,000 bound periodical volumes (over 1,200 titles in engineering), 53,730 volumes of U.S. Government publication, and 62,000 pieces of various types of microforms. Media items include a variety of formats, such as slides, videocassettes, audiocassettes, multi-media instructional kits, computer software, DVDs and CD's, along with audiovisual and microcomputer materials and the equipment required to use these materials. The Library is the only depository for federal publications in the Upper Cumberland Region. Archives contains approximately 3,615.7 ft.³ of University and regional papers, photographs, and artifacts. The map collection contains over 42,000 maps. The Library provides access to over 100 electronic resources, mostly databases, containing abstracts, articles, reports, and more. Access is available to over 12 engineering databases, including Knovel with access to over 4,000 reference works and 95,000 interactive tables, graphs, and equations. The collections include titles in a wide range of subject areas, but they are primarily designed to support the curricular needs of University faculty and students. To a degree, the collections support faculty research. The development of the government publications collection has the additional purpose of serving the public. There are no branch libraries on campus.

The Volpe Library currently has 9 faculty members, including the Dean, who holds the rank of professor, with a Master's in Library Science and an Ed.D. in Education Administration. Of the 8 librarians who hold faculty rank, all hold Master's degrees in library science, all from programs

accredited by the ALA (American Library Association), and 4 hold a second Master's degree in another area. The staff includes 1 professional administrative support, 1 archivist, 12 support staff and students equivalent to 3.15 FTE. Volpe Library functions and services are administered through the two major divisions of Public Services and Technical Services.

The Volpe Library uses Millennium, an integrated automation system from Innovative Interfaces, as its online catalog. In addition, the Library has an electronic search tool, called EagleSearch, that will search for any cataloged item (books, journals, databases, etc.) in and outside the library. These systems allow access to the Library's holdings and electronic resources from on- and off-campus. The Library is a member of the Southeastern Library Network (SOLINET). SOLINET is a regional network of the Online Computer Library Center (OCLC), a worldwide network. Through the interlibrary loan program students and faculty have access to the holdings of most of the libraries in the United States and Canada, and some libraries in other countries. This system (WorldCat) includes a record of over 2 billion library holdings for 72,000 libraries in 170 countries. Students and faculty receive items requested through interlibrary loan usually in 2 days. For faculty, the Library offers an interlibrary loan service called 'Get It Now', so electronic articles and reports requested can be sent within an average of 20 minutes from the time of request. There is no charge for any of the interlibrary loan services. Tennessee Tech has established ties with several libraries that augment the library resources on campus. Students and faculty have access to the libraries of the University of Tennessee at Knoxville and all of the libraries of the Tennessee Board of Regents system. TTU also has a reciprocal borrowing program for faculty with Vanderbilt University, located in Nashville.

The University faculty builds most of the Library's collection to meet their course and research needs. Faculty may submit requests online directly to their Library faculty member with subject knowledge in their field library, or they may direct their requests to a department liaison who reviews them before forwarding them to the Library. The number of requests and costs are almost unlimited at this time. Final decisions on purchases are made by the Volpe Library staff.

Reference librarians are available to faculty who want to explore library resources in preparation for a research assignment; that are concerned with acquiring resources for an assignment, class or new program; or who are interested in providing librarian-mediated library instruction. Faculty may request library instruction for their classes on the basics of searching for relevant materials, copyright, plagiarism, and services the library has to offer. Other instruction may be requested, such as demonstrating specific databases and providing a worksheet or assignment using library resources. All students receive instruction in the use of the Volpe Library on a minimum of two occasions. An online research tutorial and numerous resource guides are provided on the library website. Guides cover matters ranging from the physical layout of the library, to the use of the online catalog and EagleSearch, resources for academic subject areas, as well as to how to use some of the databases.