

DATE: May 17, 2019

SUBJECT: New Academic Program
University of Tennessee, Knoxville
Information Sciences, Bachelor of Science
(CIP 11.0401 – Information Science/Studies)

ACTION RECOMMENDED: Approval

PROGRAM DESCRIPTION

The University of Tennessee, Knoxville proposes a Bachelor of Science (BS) in Information Sciences. The proposed program will provide an innovative curriculum that includes instruction in areas such as information organization, user experience, usability, internet studies (web design, information architecture) and data management. The proposed program will also provide research opportunities for students which will be aligned with the existing undergraduate minor in Information Studies and Technology, Master of Science in Information Sciences, and doctoral degree in Communication and Information. Collaboration with UT partnering organizations such as Oak Ridge National Laboratory, Scripps Networks, and UT Medical Center will enrich the curriculum, provide internships, and meet workforce needs for information sciences related jobs.

INSTITUTIONAL GOVERNING BOARD APPROVAL

The proposed Information Sciences BS program was approved by the University Of Tennessee Board Of Trustees on March 1, 2019.

PROPOSED IMPLEMENTATION DATE

Fall 2019

RELEVANCE TO INSTITUTIONAL MISSION AND STRATEGIC PLAN

The proposed Information Sciences program supports University of Tennessee, Knoxville’s mission:

To move forward the frontiers of human knowledge and enrich and elevate the citizens of the state of Tennessee, the nation, and the world. As the preeminent research-based, land-grant university in the state, UT embodies the spirit of excellence in teaching, research, scholarship, creative activity, outreach, and engagement attained by the nation’s finest public research institutions.

If approved, UTK will be the first public university in Tennessee to offer an undergraduate degree in information sciences which will provide new educational

opportunities to students in the state. The proposed program is also aligned with UTK's strategic plan, Vision 2020. Additionally, this degree aligns with the State Master Plan to increase the educational attainment levels of Tennesseans; and address the state's economic development, workforce development, and research needs and the Drive to 55.

CURRICULUM

The proposed BS in Information Sciences will consist of 120 credit hours, which includes 30 semester credit hours within the major. Students will also declare a concentration in either Data, Information Management, and Analytic and User Experience Design. Students will also have the option to complete the program with a general concentration, which will be a customized course plan. Students will be required to complete a capstone course.

PROGRAM PRODUCTIVITY

The program will offer coursework year-round and students may enroll full-time or part-time. The program projects attrition rates to be 10 percent each year. Projected enrollment and graduation rates for the first five years are as follows:

| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|-------------------|---------|---------|---------|---------|---------|
| Enrollment | 10 | 18 | 26 | 34 | 42 |
| Graduates | -- | -- | -- | 8 | 18 |

PROGRAM DUPLICATION

Currently, there are no programs at the bachelor's level that offer a degree in Information Sciences at a public university in Tennessee (CIP code: 11.0401 – Information Science).

EXTERNAL JUDGEMENT

An external review of the proposed program was conducted by Dr. Russ Todd, Department Chair and Associate Professor of Library and Information Science at Rutgers University. He provided his strong support for the proposed BS in Information Sciences and was impressed by the widespread support of the program as demonstrated through the supporting letters from industry partners. Dr. Todd stated that he was “very impressed with the letters of support – these are a clear statement of industry support for the proposed program, and a testament to the employment power of the program. I see considerable potential for representatives of the organizations presented in the supporting letters to contribute to some form of Program Advisory Council, where industry partners can contribute to the ongoing development of the program in an active and participatory way.”

STUDENT DEMAND

Evidence of a significant interest in the program was reflected from a survey of undergraduate students at UTK currently enrolled in the Information Studies and Technology minor. Of the 80 students surveyed more than 65 percent said they would be interested in taking more courses in the area and enrolling in such a program of study.

OPPORTUNITIES FOR PROGRAM GRADUATES

The Tennessee Department of Labor and Workforce Development Occupational Projections for Information Technology occupations in Tennessee (2014-2024) show a consistently high annual growth in these occupations. Substantial external support for graduates of the proposed program has been demonstrated through letters of support from employers such as Oak Ridge National Laboratory, Information International Associates, U.S. Geological Society, Bohan Advertising, and Google.

INSTITUTIONAL CAPACITY TO DELIVER THE PROGRAM

The School of Information Sciences at UTK currently offers a PhD in Communication and Information, a nationally ranked accredited Master of Science in Information Sciences, and a minor in Information Studies and Technology. The School has recently restructured its Master of Science program to delete some of the courses taught by the full-time faculty. The master's degree program was 42 credit hours and has recently been reduced to 36 credit hours, this has provided teaching capacity in the academic unit and more faculty will be available to teach undergraduate courses. An additional faculty member will be hired in 2021-22 (year 3 of the program) to support the new undergraduate program.

Other budget needs for the proposed Information Sciences program include initial technology needs and recurring funds to support technology maintenance, upgrades and licenses. Appendix A outlines the 5 year financial projections for the proposed Information Sciences, Bachelor of Science program.

ASSESSMENT AND POST-APPROVAL MONITORING

An annual performance review of the proposed program will be conducted for the first five years following program approval. The review will be based on benchmarks established in the approved proposal. The benchmarks include, but are not limited to: enrollment and graduation, program cost, progress toward accreditation, and other metrics set by the institution and THEC staff. The monitoring period may be extended if additional time is needed to achieve the benchmarks. If benchmarks are not met, the Commission may recommend that the institutional governing board terminate the program.

**Tennessee Higher Education Commission
THEC Financial Projections
UT Knoxville
Information Sciences, Bachelor of Science**

Seven-year projections are required for doctoral programs.

Five-year projections are required for baccalaureate and Master's degree programs

Three-year projections are required for associate degrees and undergraduate certificates.

Projections should include cost of living increases per year.

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|
| I. Expenditures | | | | | |
| A. One-time Expenditures | | | | | |
| New/Renovated Space | \$ - | \$ - | \$ - | \$ - | \$ - |
| Equipment | - | - | - | - | - |
| Library | - | - | - | - | - |
| Consultants | - | - | - | - | - |
| Travel | - | - | - | - | - |
| Other | - | - | - | - | - |
| Sub-Total One-time | \$ - | \$ - | \$ - | \$ - | \$ - |
| B. Recurring Expenditures | | | | | |
| Personnel | | | | | |
| Administration | | | | | |
| Salary | \$ - | \$ - | \$ - | \$ - | \$ - |
| Benefits | - | - | - | - | - |
| Sub-Total Administration | \$ - | \$ - | \$ - | \$ - | \$ - |
| Faculty | | | | | |
| Salary | \$ 10,000 | \$ 20,000 | \$ 60,000 | \$ 61,800 | \$ 63,654 |
| Benefits | - | - | 24,000 | 24,720 | 25,462 |
| Sub-Total Faculty | \$ 10,000 | \$ 20,000 | \$ 84,000 | \$ 86,520 | \$ 89,116 |
| Support Staff | | | | | |
| Salary | \$ - | \$ - | \$ - | \$ - | \$ - |
| Benefits | - | - | - | - | - |
| Sub-Total Support Staff | \$ - | \$ - | \$ - | \$ - | \$ - |
| Graduate Assistants | | | | | |
| Salary | | | | | |
| Benefits | | | | | |
| Tuition and Fees* (See Below) | | | | | |
| Sub-Total Graduate Assistants | | | | | |
| Operating | | | | | |
| Travel | \$ - | \$ - | \$ - | \$ - | \$ - |
| Printing | - | - | - | - | - |
| Equipment | - | - | - | - | - |
| Other | - | - | - | - | - |
| Sub-Total Operating | \$ - | \$ - | \$ - | \$ - | \$ - |
| Total Recurring | \$ 10,000 | \$ 20,000 | \$ 84,000 | \$ 86,520 | \$ 89,116 |
| TOTAL EXPENDITURES (A + B) | \$ 10,000 | \$ 20,000 | \$ 84,000 | \$ 86,520 | \$ 89,116 |

| *If tuition and fees for Graduate Assistants are included, please provide the following information. | | | | | |
|--|------------------|------------------|------------------|------------------|------------------|
| Base Tuition and Fees Rate | | | | | |
| Number of Graduate Assistants | | | | | |
| | | | | | |
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| II. Revenue | | | | | |
| Tuition and Fees ¹ | 129,700 | 240,464 | 357,757 | 481,870 | 613,108 |
| Institutional Reallocations ² | (119,700) | (220,464) | (273,757) | (395,350) | (523,993) |
| Federal Grants ³ | - | - | - | - | - |
| Private Grants or Gifts ⁴ | - | - | - | - | - |
| Other ⁵ | - | - | - | - | - |
| BALANCED BUDGET LINE | \$ 10,000 | \$ 20,000 | \$ 84,000 | \$ 86,520 | \$ 89,116 |
| Notes: | | | | | |
| (1) In what year is tuition and fee revenue expected to be generated and explain any differential fees. Tuition and fees include maintenance fees, out-of-state tuition, and any applicable earmarked fees for the program. | | | | | |
| Only in-state tuition is included in the calculation. The current instate tuition for a full-time student semester at UTK is \$6485.00. The growth model assumes a start of 10 students and a growth of 10 students each year, with 2 lost to attrition. Year 4 assumes 8 students graduate. | | | | | |
| (2) Please identify the source(s) of the institutional reallocations, and grant matching requirements if applicable. | | | | | |
| We currently have a number of GTAs who teach our undergraduate minor courses -- many of these courses will be replaced with new ones that are part of the major, so these existing GTAs lines will be shifted to support the major. Additional reallocations are described in the narrative of the NAPP in the section Program Costs/Revenues. | | | | | |
| (3) Please provide the source(s) of the Federal Grant including the granting department and CFDA(Catalog of Federal Grants). | | | | | |
| N/A | | | | | |
| (4) Please provide the name of the organization(s) or individual(s) providing grant(s) or gift(s). | | | | | |
| N/A | | | | | |
| (5) Please provide information regarding other sources of the funding. | | | | | |
| N/A | | | | | |