Technology has been driving US economic growth for many years, thus there is an obvious economic benefit to prepare students for a technology-driven workplace. When students study technology they study and evaluate how others before them have solved problems. Hands-on experiences with technology also provide problem-solving opportunities. Virtually all employment sectors require the use of technology, and, in particular, information technology. The National Workforce Center for Emerging Technologies reports on their website that one out of every three jobs in the US either depends on information technology skills or is information technology related. Technologically literate graduates have a competitive advantage when seeking employment.

A goal of information technology fluency for university-educated adults can be targeted by creating curricular elements for student sociologists, artists, and historians (for example) to bolster their scientific and technical knowledge base. The challenge is providing sufficient depth of content for meaning without creating a chain of prerequisites that burdens degree programs outside of the College of Technology with additional semesters of study. One approach is the development of a minor that targets information technology fluency.

The following minor is proposed.

**Computer Applications Technology Minor**

The demand for sophisticated use of computers and computer software is apparent. Virtually every area of business uses commercial special purpose software applications for the creation of efficient business processes. Vendors of commercial applications usually provide support and training, but often it is very expensive. Experienced computer users can learn applications more quickly with less support and can even troubleshoot at times. Many businesses rely on computer savvy business-facing employees for some aspects of computer support. The minor in Computer Applications Technology is an 18 credit hour course of study that emphasizes experience with personal and client-server computing. The courses included develop problem solving skills that can be applied to many careers or professions. The minor also includes the course TRDE 3510 that facilitates a student’s career development and planning skills. The inclusion of this course makes the minor ideal for student in University Studies Division, some of whom are struggling with identifying personal career goals.

The minor consists of the following required course (ITEC 1301) and a selection of 2000 and 3000 level courses as indicated in the following course listing.
• ITEC 1301: Introduction to Computer Application Technology. Cr. 3. (3-0). Prerequisites: credit for or concurrent enrollment in ENGL 1303 and MATH 1310 or equivalents. Introduction to computer and information technologies and their application in the workplace.

• Students select any two of the following courses.
  o ITEC 2332: Information Technology Hardware and Systems Software. Cr. 3. (3-0). Prerequisite: ITEC 1301. A conceptual and technological survey of the structure of distributed information systems architectures, operating systems, network operating systems, data management systems, application development environments, peripheral technology, and user interfaces.
  o ITEC 2334: Information Systems Applications. Cr. 3. (3-0). Prerequisite: ITEC 1301 or ELET 2300 or equivalent. Concepts and production skills relating to information systems technologies, procedures, and resources.
  o ITEC 2337*: Introduction to Organizational Security. Cr. 3. (3-0). Prerequisite: None. Examines the fundamental principles of information security, including technical security issues, people security issues, policy issues, privacy and ethics.

• Students select any 3 of the following courses.
  o TRDE 3310 Introduction to Career Development and Planning. Cr. 3. (3-0) Prerequisites: Junior standing. Overview of the processes needed to facilitate career development and planning for individual fulfillment and workforce enhancement in the training and development environment.
  o ITEC 3325* - IT Applications for Non IT Majors. Cr. 3. (3-0). Prerequisites: ITEC 1301. A conceptual and technological survey of IT applications including business information systems, data analysis, database concepts and applications, business intelligence, and data management: warehousing, analyzing, mining, and visualization.
  o ITEC 3358*: Information Media for Organizations. Cr. 3. (3-0). Prerequisites: ITEC 2325, 2332, 2334, or 2336. Use of web-based tools and technologies for information sharing across organizations.
  o GRTC 3353 Visual Communications Technology (formerly ITEC 3353) Cr. 3. (2-3). Prerequisite: ITEC 1301 or equivalent. Graphic, digital, and filmed/taped communications processes.

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1 New course, status pending; university approval processes.
2 Course title, prerequisites, and description changes pending; university approval processes.
3 New course, status pending; subject to university approval processes.