

BOARD OF TRUSTEES OF THE NEBRASKA STATE COLLEGES
ITEMS FOR DISCUSSION AND ACTION\ACADEMIC AND PERSONNEL

ACTION: **Approve Continuation of Technology Program at Wayne State College with Annual Monitoring**

Per Policy 4200, existing academic programs shall be reviewed every seven (7) years by each College to determine the quality and effectiveness of each program, the efficiency with which each is delivered, and to avoid unnecessary duplication. Each program is evaluated based on the minimum threshold requirements established by the Coordinating Commission for Postsecondary Education (CCPE). Should a program not meet the established thresholds, Nebraska Statute 85-1414 establishes the expectation for the institution and its governing board to complete an in-depth review. Programs continued by the governing board shall be further monitored by the governing board which shall report the status and process of the monitoring to the CCPE.

During its last review, the Technology program as Wayne State College did not meet the required minimum 5-year mean threshold for number of graduates for baccalaureate programs, which is seven (7). The program has completed an in-depth review and has recommended continuation of the program. The findings of that review are provided to the Board in the attached report for approval and subsequent submission to the CCPE for consideration for continuation of the program.

The System Office and Wayne State College support the findings of the in-depth review and the recommendation for continuation of the program. The program has outlined strategies/approaches for continuing to improve enrollments and graduate production in the future, which warrants ongoing assessment and evaluation by the Board. An annual review of enrollment and graduate numbers will be shared with the Board each Spring term to monitor progress of the program's growth related to these recruitment efforts.

The System Office and Wayne State College recommend approval of the Continuation of Technology Program at Wayne State College with Annual Monitoring.

ATTACHMENTS:

- WSC 2023 Technology Program Review NSCS with In-Depth Review Final (PDF)

WSC Academic Program Review Report 2023
 Technology

1. **Section One: Overview of Program Offerings**

Major	Option, Concentration, Focus Area or Endorsement	Minor	Undergraduate	Credit Hours
Technology	Agricultural Occupations		BA, BS	57
Technology	Computer Occupations		BA, BS	57
Technology	Construction Occupations		BA, BS	57
Technology	Drafting Occupations		BA, BS	57
Technology	Industrial Management Occupations		BA, BS	57
Technology	Industrial Trades Occupations		BA, BS	57
Technology	Management Services Occupations		BA, BS	57
Technology	Manufacturing Occupations		BA, BS	57
Technology	Safety Occupations		BA, BS	57

2. **Section Two): Analysis of Program, Including Adequacy of Resources and Related Concerns**

Analysis of Program

When the 2015 review was completed this program was low enrolled and unknown to prospective Wayne State College students. As a result, plans were implemented in 2017 to activate this degree program. An agreement was drafted in partnership with Metropolitan Community College (MCC) in Omaha and WSC allowing AAS graduates from MCC to transfer 80 credit hours of coursework into the BS in Technology Degree. By late 2018 WSC had hired a full-time staff member to work in Omaha to develop this program that would allow WSC to offer courses in Omaha to students pursuing this degree.

In effort to gain support in from Omaha Metro Area businesses, WSC set up multiple meetings with stakeholders. As a result, the concept of helping students bridge the gap from an AAS degree to a BS degree was discussed. Employers reviewed course descriptions and curriculum for proposed coursework and provided input on what would make the program more valuable to their current and future employees. This information was used to develop a course sequence and curriculum that industry partners were willing to stand behind stating that they gladly would hire an individual that had completed this coursework.

WSC began offering face-to-face classes in Omaha on MCC Fort Omaha Campus in the fall of 2019. This was short lived as we were required to shift to synchronous virtual instruction in the spring of 2020. MCC classrooms remained closed well into 2021 requiring us to maintain virtual synchronous and asynchronous instruction options. Since this transition, multiple surveys of our Omaha based students have been completed and have continued to reinforce that students enrolled in this program prefer to be able to attend/complete classes online or via synchronous instruction but would prefer not to return to face-to-face instruction.

This transition to online learning has opened doors for Nebraskans to be able to enroll in this program without worrying about their geographic location. Since 2019, WSC has signed similar agreements with Northeast Community College in Norfolk, Western Iowa Tech Community College in Sioux City, IA, Central Community College in Hastings, Grand Island and Columbus and with Southeast Community College in Lincoln and Milford.

Today, WSC is working to strengthen our relationships with these community colleges and ensure that students graduating with an AAS degree in Nebraska are aware of this unique opportunity. It is especially attractive to Nebraska's community college graduates because it gives them the flexibility to enroll in WSC courses as a part-time student and continue to work full-time and advance their career. The WSC School of Business and Technology faculty and staff have gone and visited the campuses of our community college partners and have started to build relationships that will allow us to continue to develop a pipeline for Nebraska's future industrial leaders. During these visits, conversations have increased awareness of this option for current community college students and graduates. As a result, enrollments have increased from one in 2017 to 34 in 2022. We will continue to be present whenever possible to recruit, inform, and advise prospective students.

Adequacy of Resources and Related Concerns

Faculty and faculty-related resources

The BA/BS in Technology is an interdisciplinary program which is typically delivered by faculty members from Industrial Technology and Business & Economics. At the current time, faculty resources for the BA/BS in Technology program are adequate.

Informational resources (library, technology, data services, etc.):

General Resources:

The Conn Library building underwent a total building renovation that was completed in 2017. The redesigned building now provides a variety of different learning spaces. Features include:

1. Sixteen small group and individual study rooms that are available for students.
2. Three technology-infused, easily reconfigurable teaching classrooms.
3. Tutoring services supervised by the Holland Academic Success Center

The Library is open approximately 90 hours weekly, serves approximately 224,000 students, staff, faculty and community members annually. The library's information desk provides in person and telephone reference services and instruction 60 hours weekly. Librarians provide over 200 information literacy instruction classes or guest speaking sessions annually to Wayne State College students and area high schools. Interlibrary loan arrangements with state colleges and universities as well as with libraries throughout the nation have ensured that materials not housed in the collection can be made available within an average of two to three working days.

The campus network provides off and on campus access to the library's catalog, Discovery system, and dozens of databases. More than 40,000 journal titles are available in full text from the library's journal database subscriptions. Over 350,000 monographic and 1,200 periodical titles are housed in the Conn Library Collection.

Technology Resources:

Appropriate technical resources are available. Technology support is available six days per week through phone, email, or by visiting the NATS Help Desk Service Center. Technology students and faculty have access to the same centralized technology support services available to all WSC affiliates including support for both campus and personal technology needs. The NATS Help Desk Service Center is currently utilizing the InfoTech Research Group analyst services for optimizing technology support services. The current IT support management (ITSM) software system will soon be replaced to improve the process for identifying technology needs across campus and to prevent support services from being a barrier to student and faculty success.

In January 2023, NATS installed 24 high powered workstations in the Library for Industrial Technology, Engineering Technology, and Technology students. In order to maintain relevancy, it is critical that the TASC Department maintain specialized software such as AutoDesk Revit, Solidworks, Adobe, and CNC software.

Data Resources:

The Technology faculty are provided access to a considerable amount of internal data via the various systems and applications accessible through the “My WSC” branded portal available over the college network. Monthly reports regarding departmental budget status are provided to the TASC Department Chair. Examples of such internal reports and external data sources include:

1. Major-Minor Reports (which show enrollment status of Concentrations and Endorsements)
2. QAR reports (data and information regarding key institutional and program variables and metrics)
3. Admissions Reports
4. Course Enrollment History Reports
5. Faculty Load Reports
6. Student Migrations Between Academic Program Reports
7. Print and Photocopying Services Usage Reports
8. Academic Calendar Reports (and updates)

Physical facilities and instructional equipment, if applicable:

In 2019, the Center for Applied Technology (CAT), was built and remains the newest facility on campus. The CAT houses the Technology and Applied Science Department and the Technology program. The 53,000-square-foot structure includes two new classrooms and 13 new state-of-the-art instructional labs. This new space creates synergy through faculty alignment enhancing the student experience.

The CAT features computer labs, a robotics lab, drafting and design lab, industrial technology labs and additional classrooms. The center features new tech-savvy classrooms and instructional labs for drafting and design, manufacturing, welding, power and energy, construction and woodworking, robotics, computing and networking, and mechatronics (technology combining electronics and mechanical engineering). The lab spaces provide hands-on learning experience with equipment and technology that directly transfer to jobs in the industry.

Fiscal resources:

The TASC Department uses the departmental budget to support the recurring costs, necessary periodic, equipment upgrades, required service contracts, supplies expenditures, faculty travel, and other appropriate costs. The budget has adequately supported the TASC Department during the period addressed by this report’s time frame.

However, much of the equipment was new when the CAT building was built. This equipment is nearing its useful life. The ITE program estimates that equipment replacement costs are approximately \$100,000/year (See ATMAE eight year Technology Equipment Plan).

3. Evidence of Demand and Efficiency (per established CCPE standards for 5-year means)

Number of Degrees/Awards in Program		SCH/FTE
Baccalaureate	7	300
Masters	5	300
Specialist	4	300

		17-18	18-19	19-20	20-21	21-22	5 yr avg
Student Credit Hours (SCH)		2,097	1,978	2,089	2,462	2,697	2,265
Faculty Full-time Equivalency (FTE)		5.39	4.75	6.60	7.52	7.45	6.34
SCH/Faculty FTE		389	416	316	327	362	357
Number of Degrees and Awards <i>(list degrees/ awards separately)</i>	BA/BS	0	0	3	6	7	3

4. Section 4: Justification and Evidence of Need

Program is critical to the role and mission of the institution

The BA/BS in Technology program plays a vital role in the mission of Wayne State College (WSC) and the Nebraska State College System. The WSC’s mission statement of inspiring students through access to affordable, high quality, academic programs through our strategic partnerships and ability to obtain a four-year bachelor’s degree strongly aligns with the BA/BS in Technology programmatic outcomes. The BA/BS in Technology program works with our community college partners to facilitate career paths for students to meet regional needs. More recently, WSC has partnered with four community colleges to increase the number of four-year graduates in the state of Nebraska who are pursuing management positions in industrial technology fields. Through these partnerships, students who have completed an AAS can transfer up to 80 credit hours to WSC to obtain their four-year degree in Technology.

Student or employer demand, or demand for intellectual property is high and external funding would be jeopardized by discontinuing the program

This program is targeted towards working individuals who have attained an Associate of Applied Science degree and are seeking occupations considered H3 (high skill, high wage, and high demand) in our region. Some of the H3 occupations include:

- General and Operations Managers
- Computer and Information Systems Managers
- Human Resource Managers
- Purchasing Managers
- Construction Managers
- Industrial Production Managers

In addition, there has been increased student enrollment in this program, which provides further evidence of student demand. The enrollment growth is a direct result of strategic partnerships with community colleges in Iowa and Nebraska. There have been four memoranda of agreement executed since 2017, which target graduates with AAS degrees who want to pursue management in their respective fields. Enrollment figures are depicted below:

BA/BS IN TECHNOLOGY - NUMBER OF STUDENTS ENROLLED					
2017	2018	2019	2020	2021	2022
1	2	13	16	27	34

Program meets a unique need in the region, state, or nation

The BA/BS in Technology meets a specific need for Nebraska as it pertains to the state's goal of educational attainment. According to the 2022 Nebraska Higher Education Progress Report, the Nebraska Coordinating Commission set a goal that Nebraska would rank in the top 10 states for educational attainment (Nebraska currently ranks 18th in percentage of citizens with a bachelor's degree or higher). To reach the top 10 goal, the state of Nebraska needs "nearly 39,000 more residents with bachelor's degrees or higher among its approximately 950,000 adults aged 25 to 64".

Students enrolled in this program almost exclusively work full-time jobs in related fields that demand a bachelor's degree for them to advance in their career. We can provide multiple examples of individual students who are working in a management position with the understanding that they will work toward completing their BS degree. In several circumstances, the employer is also paying for part, or all, of their student's tuition expenses to obtain their degree. Students enrolled in this degree can continue working full-time and take courses part-time through Wayne State College.

Source: Coordinating Commission for Postsecondary Education. (2022, March 10). 2022 Nebraska higher education progress report executive summary. Retrieved November 10, 2022, from https://ccpe.nebraska.gov/sites/ccpe.nebraska.gov/files/PR_Executive_Summary.pdf

Plan for Continuation

The BA/BS in Technology program plays a significant role in the mission of the College, as well as the Strategic Plan.

The WSC's mission statement states that we inspire students through access to affordable, high quality, academic programs through our strategic partnerships. The BA/BS in Technology program works with our community college partners to facilitate career paths for students to meet regional needs.

The most recent WSC Strategic Plan includes five goals, one of which is Regional and Economic Impact. Part of this strategic goal includes increasing enrollment in signature programs with high schools, community colleges, and university partners. The core values of this goal include identifying and establishing educational partnerships to facilitate career paths.

The BA/BS in Technology initiatives support the mission and the WSC Strategic Plan. We have executed four MOAs with educational partners, which has directly resulted in the growth of this program. The growth is also a result of workforce demands.

We are currently reviewing a fifth MOA with another Nebraska community college. With these five partners on board, we will continue to develop relationships with their advisors and faculty to provide these career pathways for their students.