



Board of Trustees of the Nebraska State Colleges

Meeting Date: **June 11, 2026**

Agenda Item: **2.15**

ITEMS FOR DISCUSSION AND ACTION:

Committee: **Academic & Personnel Committee**

Action Item: **Addition of Supplemental Endorsement, 7-12 Computer Science - WSC**

This proposal establishes a two-course, six-credit-hour pathway for a supplemental endorsement in Computer Science aligned with the Nebraska Department of Education (NDE) Rule 24 and the Nebraska Computer Science and Technology Standards. The endorsement prepares licensed teachers to deliver standards-based instruction in grades 7-12 and addresses Nebraska's Computer Science and Technology Education Act requirements.

The System Office recommends approval of the addition of a Supplemental Endorsement 7-12 Computer Science at Wayne State College.

ATTACHMENTS:

- Supplemental Teaching Endorsement - Computer Science

Wayne State College
Proposal to Add: Supplemental Endorsement, 7-12 Computer Science

1. Descriptive Information

- A. Name of Institution: Wayne State College
- B. Name of Program: Computer Technology and Information Systems
- C. Degrees/credentials to be awarded graduates of the program: Supplemental Endorsement, Computer Science (7-12)
- D. Other programs offered in this field by the institution:

Business, Marketing, and Information Technology (6-12 Education Field Endorsement)
Computer Information Systems
Computer Science
Integrated Technology Support
Networking and Cybersecurity
Programmer/Analyst
Technology
Web Specialist
Information Technology Management (MSOM)

Minors in: Computer Science, Management Information systems, Computer Information Systems

K-12 Supplemental Endorsements: Business, Marketing, and Information Technology (6-12),
Information Technology Education (K-12)
- E. CIP code: NA – Supplemental Endorsement – Nebraska Department of Education
- F. Administrative units for the program: Department of Computer Technology and Information Systems, School of Business and Technology
- G. Proposed delivery site(s) and type(s) of delivery, if applicable: Courses will be delivered on campus and via virtual modality. Coursework may be offered as 400/500 level courses, allowing for application on the undergraduate or graduate level and leading to the supplemental endorsement.
- H. Proposed date (term/year) the program will be initiated: Fall 2026
- I. Description of Program Change:

This proposal establishes a two-course, six-credit-hour pathway for a supplemental endorsement in Computer Science aligned with the Nebraska Department of Education (NDE) Rule 24 and the Nebraska Computer Science and Technology Standards. The endorsement prepares licensed

teachers to deliver standards-based instruction in grades 7-12 and addresses Nebraska’s Computer Science and Technology Education Act requirements.

Rationale: Alignment with Nebraska Rule 24 and Standards

Nebraska Rule 24 requires at least six semester hours in the content and instruction of computer science and technology education for a supplemental endorsement. The following two courses meet and exceed this requirement, ensuring coverage of programming, cybersecurity, digital citizenship, and instructional methods.

Requirement	Rule 24 Alignment	Program Plan
Credit Hours	Minimum 6 hours in content and instruction	Two 3-credit courses
Content Areas	Algorithms & Problem Solving Programming & Development Impacts of Computing Computing Systems & Networks Cybersecurity Foundations	Mapped to Nebraska CS Standards CS.HS.5, CS.HS.6, CS.HS.2, CS.HS.3, CS.HS.4
Instructional Component	Pedagogical integration required by Rule 24	Teaching methods and assessment embedded in both courses

Computer Science (7-12)

**Computer Technology and Information Systems Department
School of Business and Technology
Supplemental Endorsement**

Requirements, 6 credit hours

CSC 441 Cybersecurity, Digital Citizenship, & Emerging Technology.....	3
CSC 443 Computational Thinking & Programming Foundations	3

Computer Science (7-12)

**Computer Technology and Information Systems Department
School of Business and Technology
Supplemental Endorsement**

Requirements, 6 credit hours

CSC 541 Cybersecurity, Digital Citizenship, & Emerging Technology.....	3
CSC 543 Computational Thinking & Programming Foundations	3

Course Descriptions

CSC 441/541 Cybersecurity, Digital Citizenship & Emerging Technologies (3 hours) This course introduces the principles and practices of cybersecurity, digital citizenship, and the societal impacts of emerging technologies. Students will explore how to protect personal and organizational data, recognize and respond to common cyber threats, and apply responsible online behavior in academic, professional, and social contexts. Topics include data privacy, ethical technology use, digital footprints, social engineering, cybersecurity awareness, and the influence of emerging technologies such as artificial intelligence, blockchain, and the Internet of Things (IoT).

CSC 443/543 Computational Thinking & Programming Foundations (3 hours) This course introduces students to the core principles of computational thinking and the foundational skills of computer programming. Emphasis is placed on problem-solving, algorithmic design, abstraction, pattern recognition, and logical reasoning. Students will learn to decompose complex problems and translate solutions into structured, readable code using a beginner-friendly programming language such as Python. Topics include variables, data types, control structures, functions, and basic data structures. Through interactive labs and projects, students will develop the ability to approach challenges methodically and apply computational methods to real-world contexts across multiple disciplines.

2. Centrality to Role and Mission

The proposed addition of the Computer Science supplemental endorsement will have a positive and collaborative impact across the School of Business and Technology and serves to maintain a strong alignment with existing education programs supported in the School of Education and Behavioral Sciences. The “dual listed” nature of the program provides cross-listing advantages between programs in two different schools and also allows for flexibility when students are considering coursework in an undergraduate or graduate pathway.

3. Evidence of Need and Demand

This endorsement supports Nebraska’s Computer Science and Technology Act (LB 1112) by preparing qualified educators to teach Computer Science and information Technology in grades 7-12 and PK-12.

It strengthens Wayne State College’s role as a regional leader in STEM and technology education, enhancing opportunities for both undergraduate pre-service and graduate in-service educators. By aligning with Nebraska Rule 24, this pathway addresses the statewide need for certified computer science teachers without adding course redundancy or increasing instructional loads beyond current program capacities.

4. Adequacy of Resources

A. Faculty and Staff Resources:

The course offerings are to be taught by existing faculty members, including full time and adjunct faculty members.

B. Instructional Equipment and Informational Resources:

No additional resources required.

C. Budget Projections for the first five years of program:

This program will use existing resources. If additional resources are needed to support offering additional endorsements, the schools of BST and EBS will receive resources according to their budget needs.

Avoidance of Unnecessary Duplication

Wayne State College already offers teacher certification and content area endorsement options, so the proposed supplemental endorsement does not deviate from the mission of the institution, nor does it create a duplicative burden for other institutions in the Nebraska State College System.

Consistence with the Comprehensive Statewide Plan for Postsecondary Education

The proposed addition of the two course/six credit pathway for a supplemental endorsement provides relevance to two primary areas of the Comprehensive Statewide Plan for Postsecondary Education, including responsiveness to workforce development and building a “knowledgeable, trained and skilled workforce;” as well as “preparing individuals for productive, fulfilling lives by developing and nurturing the citizens and future leaders of Nebraska.”

TABLE 1: PROJECTED EXPENSES - NEW INSTRUCTIONAL PROGRAM

	FY _____ Year 1		FY _____ Year 2		FY _____ Year 3		FY _____ Year 4		FY _____ Year 5		Total	
Personnel	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost
Faculty ¹												
Professional ²												
Graduate assistants												
Support staff												
Subtotal												
Operating												
General Operating ³												
Equipment ⁴												
New or renovated space ⁵												
Library/ Information Resources ⁶												
Other ⁷												
Subtotal												
Total Expenses												

¹ Show the number of additional full-time equivalent faculty and related salary and fringe benefit expenditures needed to implement program.

² Show the number of additional full-time equivalent professional staff (post-docs, non-faculty academic administrators, etc.) and fringe benefit expenditures needed to implement and maintain the program.

³ Include allowances for faculty development, laboratory supplies, travel, memberships, office supplies, communications, data processing maintenance, rentals, etc.

⁴ Show anticipated expenditures for the acquisition of new or upgrades or replacement of existing equipment necessary for the operation of the program.

⁵ Show projected expenditures for any facilities (general classroom, laboratory, office, etc.) that will be required. Include renovation and construction of new facilities.

⁶ Show anticipated expenditures for library materials or other informational resources directly attributable to the new program.

⁷ Additional Other Expenses: Show other expenses not appropriate to another category, such as marketing.

NOTE: All items requiring explanation may be included on this page or in the proposal narrative. Remove unneeded rows.

TABLE 2: REVENUE SOURCES FOR PROJECTED EXPENSES - NEW INSTRUCTIONAL PROGRAM

	FY____ Year 1	FY____ Year 2	FY____ Year 3	FY____ Year 4	FY____ Year 5	Total
Reallocation of Existing Funds ¹						
Required New Public Funds ²						
1. State Funds						
Tuition and Fees ³						
Other Funding ⁴						
Total revenue for new program						

¹ Show the total amount of dollars the institution will reallocate from its budget to support this program. Identify the source of funding and provide an explanation of the impact that the redistribution of funds will have on existing programs.

² This represents a requirement for additional public funds to support this program. If additional state funds are required, this request will have to be included in the institution's budget request. Separately detail all sources for additional funds. For community colleges, this would include local tax funds.

³ Show additional tuition and fee revenues that will be generated by this program.

⁴ Show the amount of external funding or donations which the institution anticipates will become available each year to support this program. Include a brief explanation of the nature of these resources including their specific source and the term of the commitment.

NOTE: Where appropriate, show calculations and/or formulas that were used to project new revenue, e.g., number of new students projected multiplied by tuition and fees. This can be provided as additional lines of the table, or within the proposal narrative.