Section II

Wisconsin Standards for Business and Information Technology

Business and Information Technology is a Part of Career and Technical Education

The standards outlined in this document provide an important foundation to prepare individuals for a wide range of careers in Business and Information Technology (BIT). BIT is part of a larger system referred to as career and technical education (CTE). CTE in Wisconsin is both a collection of educational programs or disciplines as well as a system of preparing students for career, college, community, and life. CTE programs are delivered primarily through six specific disciplines. These include:

- Agriculture, Food, and Natural Resources

- Business and Information Technology

- Family and Consumer Sciences

- Health Science

- Marketing, Management, and Entrepreneurship

- Technology and Engineering

A National Vision for CTE

The National Association of State Directors of Career and Technical Education has developed a bold vision for CTE titled "Without Limits: A Shared Vision for the Future of Career Technical Education" (CTE Without Limits). This vision lays out a cohesive, flexible, and responsive career preparation ecosystem designed to close equity gaps in educational outcomes and workforce readiness, and leverage CTE as a catalyst for ensuring each learner can reach success in the career of their choice. Wisconsin supports the five interconnected and equally critical principles:

- Each learner engages in a cohesive, flexible, and responsive career preparation ecosystem.

- Each learner feels welcome in, is supported by, and has the means to succeed in the career preparation ecosystem.

- Each learner skillfully navigates their own career journey.

- Each learner's skills are counted, valued, and portable.

- Each learner can access CTE without borders. In other words, as learners become increasingly mobile and not place-based,

and as more learning and work happens remotely, geographic barriers that limit access and opportunities for learners, particularly those in rural communities, need to be removed.

Wisconsin's Vision for Career and Technical Education
The Wisconsin vision for career and technical education (CTE) is shaped by Wisconsin practitioners, experts, and the business community, and is informed by work at the national level and in other states. The overarching goal of Wisconsin's vision for CTE is for students to see themselves as confident doers and learners in a career pathway, supporting the department's vision to be engaged learners fully prepared to create a better Wisconsin together.

Building a Foundation of Career Readiness

As noted in Section I, the Wisconsin Career Readiness Standards (WCRS) capture the knowledge, skills, and abilities that students need to be successful in their chosen career pathway and will lead to workplace success. Because career and technical education (CTE) prepares all students for their future career, education, and ultimately life success, the WCRS are a natural fit for any CTE course. Educators will find many of the WCRS embedded in the BIT standards. Here is an example of what WCRS looks like in BIT:

Wisconsin Career Readiness Standards	Wisconsin Business and Information Technology Standards
Career Ready (CAR) **WCRS.CAR.2.A:** Identify the in-demand career and entrepreneurship opportunities that align with personal interests, skills, and work values.	Entrepreneurship (EN) **BIT.EN.1.B.b.1:** Identify the characteristics and skills of a successful entrepreneur.
Learning Ready (LRN) **WCRS.LRN.4.A:** Use word processing applications to organize and effectively communicate information.	IT Foundations (IT) **BIT.IT.1.B:** Use word processing applications to organize and effectively communicate information.

Life Ready (LIF)	Business Communication (BC)
WCRS.LIF.2.B: Communicate and collaborate effectively with others, using various modes of communication, across languages, cultures, and contexts.	**BIT.BC.2.A.a.5:** Establish an understanding and respect for the customs and communication styles of diverse cultures.

CTE in the Elementary Grades

Another way to build the foundation for career readiness is to expose students to career and technical education in the elementary grades. We encourage elementary educators to intentionally weave appropriate CTE standards into subject areas such as math, science, social studies, and English. Educators will be able to learn more about how to implement the Wisconsin Career Readiness and other CTE standards in elementary grades in a future publication, "Wisconsin's Guide to K-5 Career Readiness."

Business and Information Technology (BIT) has a presence at the elementary grade level, especially related to digital literacy and keyboarding. Knowledge and skills in these areas are grown throughout the elementary curriculum. BIT teachers in districts are an excellent resource to assist in the development of curriculum and activities. Teachers can effectively use CTE concepts in instruction and activities to develop foundational skills and create a connection to the world of work. The leadership of a BIT-licensed teacher can support learning at all grade levels to create a continuum of learning from the elementary grades to high school. The collaborative relationship between elementary classroom teachers with BIT-licensed teachers ensures students are acquiring the fundamental skills to be successful in their future.

Elementary standards for Business and Information Technology can be found in *Appendix B*.

Delivering CTE Through Career Pathways

Through CTE, learners not only gain awareness of various careers, but also have opportunities to engage in deeper exploration and preparation through a career pathway. Each pathway—whether health science, agriculture, business, construction, or engineering, to name a few—includes elements of career and technical education that help students develop the knowledge and skills to be successful in the career of their choice.

While there is a national career cluster and pathway framework that serves to organize occupations into 16 clusters and 79 pathways, the term "career pathway" used throughout this document refers to an education and workforce development system

approach that enables students to embark on a plan that outlines the education and training opportunities that will help them move toward a career goal.

Elements of CTE that create a career pathway include:

- A sequence of CTE courses that build from introductory to more advanced levels

- Work-based learning experiences

- Career and technical student organizations (CTSOs)

- Dual enrollment or college credit opportunities

- Industry-recognized credentials

Wisconsin schools use the above elements as a framework to engage with stakeholders to provide rich and authentic opportunities and experiences that help students gain knowledge and skills that go beyond the classroom experience.

While schools may independently build their own career pathways, Wisconsin's regional career pathway (RCP) approach makes the process easier for individual school districts by vetting some of the career pathway components on a regional basis and tailoring pathways to address regional employment needs. Wisconsin's regional career pathway network covers seven regions—each with its own advisory group of local employers, educational organizations, and economic and workforce development interests.

Partnerships that bring business and educational organizations together are an effective way to ensure that students are gaining practical and up-to-date knowledge and skills necessary to get a jump-start on a career in their regional industries. Leading employers share direct input on the latest tools, practices, and processes in an industry, while K-12 schools and other educational organizations offer the professional expertise to engage and teach young learners using standards within this document.

Career Pathway Elements

A sequence of CTE courses that build from introductory to more advanced levels.
Academic standards define what students should know and be able to do in an area of study. In career and technical education, standards are integrated with technical skill development based on industry standards. A coordinated sequence of two or more academic courses incorporating challenging state standards builds student knowledge, technical skills, and employability skills. The BIT standards are designed to allow educators to build these courses from introductory level content to advanced skills. The BIT standards were developed with reference to the national standards.

The sequencing of courses in BIT fits several different career clusters, most specifically related to:

| Arts, Audio/Video Technology, and Communications | Business, Management, and Administration | Finance | Information Technology | Marketing, Sales, and Service | Science, Technology, Engineering, and Math |

Work-Based Learning

Work-based learning (WBL) opportunities are employer-connected experiences that allow K-12 students to participate in career awareness, career exploration, and career development. Academic standards serve as the foundation of WBL and allow students to apply knowledge and technical skills to real-world projects and problems alongside professionals. Having students participate in work-based learning is a priority in Wisconsin and is reflected on DPI's School Report Cards and federal (Perkins V) accountability reports. Participation in work-based learning is only calculated if the program meets the following criteria:

1. Involves sustained interactions, either paid or unpaid, with industry or community professionals.

2. Sustained = minimum of 90 hours, which can be rotated among employers or positions. The employer is engaged throughout the experience. It can take place in one semester, an entire year, the summer, or even a six-week period.

3. Interactions must be more than just observing and include direct communication and involvement with industry or community professionals.

4. Takes place in real workplace settings (as practicable) or simulated environments at an educational institution.

5. Fosters in-depth, firsthand engagement with the tasks required in a given career.

6. Aligns with a course that, generally speaking, should be a minimum of one semester. It is highly encouraged to provide credit for the work-based learning experience as well as credit for the school-based course.

7. Must include a training agreement between the student, employer/business, and school that defines the roles and responsibilities of the student, the employer, and the school.

8. Business and education partners work together to evaluate and supervise the experiences, which must be documented with training or learning plans and evaluation forms.

There are numerous work-based learning programs designed to support student mastery of competencies and also count towards accountability measures. These programs are all outlined in the *Wisconsin Guide to Implementing Career-Based Learning Experiences.*

In BIT, career-based learning can take many forms including:

- School-based enterprise (SBE)

- Student entrepreneurial experience (SEE)

- Internship or local co-op

- State-certified employability skills co-op

- State-certified occupational program co-op

- Youth Apprenticeship – Apprenticeships may be in Business Administration, Finance, Graphic Design, Medical Office, Hospitality and Tourism, and Information Technology.

Career and Technical Student Organizations
Career and technical student organizations (CTSOs) develop citizenship, technical, leadership, and teamwork skills essential for students who are preparing for the workforce and further education. They enhance students' civic awareness and provide opportunities for developing social competencies and a wholesome attitude about living and working.

Wisconsin has six state and nationally recognized CTSOs that are intracurricular. In other words, they connect directly to the classroom through curriculum, activities, and community resources. All CTSOs include leadership development and competitive events where students demonstrate technical and leadership skills. CTSOs prepare young people to become productive citizens and leaders in their communities and their careers. This is done through school activities along with regional, state, and national leadership conferences and competitions. Students grow and develop through these events and receive recognition for the work

they have done and the skills they have developed. CTSOs provide an exceptional extension of CTE instruction. Wisconsin's CTSOs include:

Wisconsin Future Business Leaders of America (FBLA) is affiliated with the national Future Business Leaders of America, the largest business student organization in the world, serving more than 230,000 members preparing for careers in business. FBLA follows the mission statement: FBLA inspires and prepares students to become community-minded business leaders in a global society through relevant career preparation and leadership experiences. The first Wisconsin FBLA chapter was chartered in 1942, and the first state conference was held in 1954. Students build skills through FBLA competitions, conferences, and leadership opportunities directly aligned to the standards for Business and Information Technology. FBLA offers experiences for middle school, high school, and collegiate members, allowing for growth and exploration to partner with classroom experiences. For more information on FBLA, please visit the Wisconsin FBLA website at www.wifbla.org.

Industry-Recognized Credentials

Industry-recognized credentials (IRCs) are certifications, credentials, or licenses that are vetted by employers and recognize skill attainment needed for recruitment, screening, hiring, retention, advancement, or to mitigate workforce shortages. Earning industry credentials while in high school helps students prove their competence and improve their employment prospects, sometimes immediately after graduation. CTE courses are designed to improve career-based learning, and many IRCs fit perfectly into the curriculum and can be added to the student's resume following certification.

Dual Enrollment and College Credit Opportunities

Dual enrollment includes a variety of programs through which high school students are enrolled simultaneously in both high school and college to earn credit through each. A dual enrollment course can take place at the high school, at a college or university, or through an online or distance course. Local school districts partner with higher education partners to provide training for instructors to offer these courses, or avenues for students to participate in courses on campus or online. Successful completion of the coursework by a student will not only gain them a grade toward high school graduation, but also transferable credits for their postsecondary education.

Discipline Standards Structure

The Wisconsin Standards for Business and Information Technology follow a specific structure:
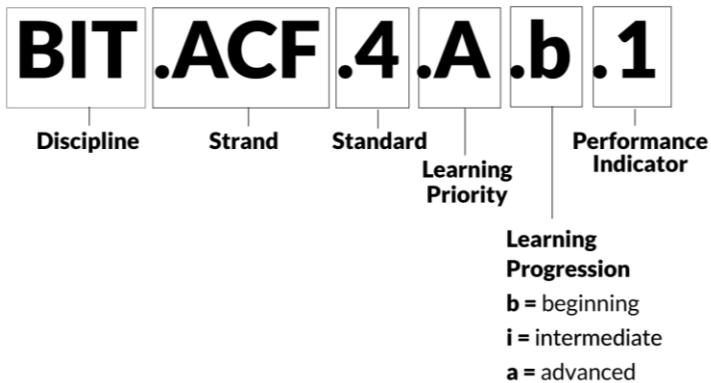
Standards Formatting

- **Discipline:** CTE program area

- **Strand:** Instructional topic within the discipline

- **Standard:** Broad statement that tells what students are expected to know or be able to do

- **Learning Priority:** Breaks down the broad statement into manageable learning pieces

- **Performance Indicator by Learning Progression:** Measurable degree to which a standard has been developed and/or met

Standard Coding

Strands for Business and Information Technology in this code structure include:

- Accounting and Finance (ACF)
- Business Communications (BC)
- Business Law and Ethics (BLE)
- Digital Communications and Media (DCM)
- Economics (EC)
- Entrepreneurship (EN)

- Foundations of Computer Science (CS)
- Global Business (GB)
- Hardware and IT Infrastructure (HIT)
- IT Foundations (IT)
- Management (MAN)
- Marketing (MKT)

Key to Standards Coding

BIT — Discipline
.ACF — Strand
.4 — Standard
.A — Learning Priority
.b — Learning Progression
.1 — Performance Indicator

Learning Progression
b = beginning
i = intermediate
a = advanced

Sample of Standards Table

Standard: BIT.ACF.4
Students will apply payroll and tax theories and procedures.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.ACF.4.A: Complete payroll procedures to calculate, record, and distribute payroll earnings.	**BIT.ACF.4.A.b.1:** Process payroll earnings records to calculate employee earnings and withholdings.	**BIT.ACF.4.A.i.1:** Calculate employer's payroll taxes for Social Security, Medicare, federal unemployment, and state unemployment.	**BIT.ACF.4.A.a.1:** Prepare federal, state, and local government payroll reports.
BIT.ACF.4.B: Analyze how employer taxes impact business operations.	**BIT.ACF.4.B.b.1:** Analyze the effects of payroll taxes for various types of business ownership.	**BIT.ACF.4.B.i.1:** Prepare employer-related tax forms.	**BIT.ACF.4.B.a.1:** Journalize and post tax entries.

Performance Indicator by Learning Progression

The 2024 Wisconsin Standards for Career and Technical Education (CTE) mark a shift in how progress is recognized in a CTE subject area. The new standards describe three levels of proficiency or mastery of industry expectations: beginning, intermediate, and advanced. This contrasts with the 2013 CTE standards, which focused on performance indicators by three grade bands: PK-5, 6-8, and 9-12.

Given the wide range of delivery models used, CTE does not lend itself to grade bands. In other words, CTE programming may be either nonexistent or robust at the elementary or middle school levels. A beginning course, for example, may be offered in any grade. The 2024 CTE standards, more appropriately, shift from looking at knowledge and skills acquired by the end of certain grade levels to the increasing mastery a student acquires as they pursue their desired career pathway, regardless of the grade the student begins on that path. Here then are the three levels in more detail:

- Beginning: Developing awareness

- Intermediate: Building foundational knowledge and skills

- Advanced: Implementing specific knowledge and skills

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.BLE.1.C: Illustrate the legal process differences in civil and criminal cases.	**BIT.BLE.1.C.b.1:** Define crime.	**BIT.BLE.1.C.i.1:** Differentiate between civil and criminal law.	**BIT.BLE.1.C.a.1:** List and explain the steps in criminal and civil trials.
		BIT.BLE.1.C.i.2: Compare classification of crimes.	**BIT.BLE.1.C.a.2:** Explain the advantages and disadvantages of alternative dispute-resolution methods and litigation.
		BIT.BLE.1.C.i.3: Explain procedural and substantive law.	**BIT.BLE.1.C.a.3:** Analyze different business-related crimes (for example, tort, contract, property).

The standards were designed to be flexible based on the unique needs of each Business and Information Technology program. Courses are meant to be aligned to the standards through the scaffolding of student learning and level of mastery desired. Each learning priority has one or more performance indicators by learning progression, reflecting a sequential flow of learning and a continuum from beginning to advanced. Course design may consist of the full continuum or may begin and end with any learning progression level. Furthermore, the performance indicator descriptors may cross over or overlap each other from one level to the next. For example, the beginning level may include some foundational knowledge and skill-building connected to the intermediate level versus solely focusing on developing awareness.

BIT performance indicators were written to allow the educator to build content from beginning to advanced levels, based on the design of the course. In several standards, there is not a set sequence of performance indicators. This allows the educator to pull a performance indicator from a different standard but lays the foundation for intermediate or advanced learning taking place. Many beginning performance indicators can be used across different standards, and the need to repeat performance indicators in all locations where it could be placed would have been overwhelming for educators. The design allows for flexibility to fit the

needs of the educator, course, and district in order for students to demonstrate their knowledge of the content.

More aligned to postsecondary curriculum than past standards, the 2024 CTE standards provide programs an opportunity to help students build content knowledge, explore careers pathways, and plan for postsecondary options. They also align with industry requirements, ensuring they meet current needs yet are flexible enough to absorb inevitable changes in industry processes and the economy as a whole.

In conclusion, these standards provide a foundation for a variety of applications in each of Wisconsin's districts.