

WISCONSIN STANDARDS FOR **Business and Information Technology**



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Foreword



In Spring 2024, I formally adopted the Wisconsin Standards for Business and Information Technology. This revised set of academic standards provides a foundational framework that identifies what students should know and be able to do in Business and Information Technology.

The standards are a result of a concerted effort led by Wisconsin educators and partners who shared their expertise in Business and Information Technology and teaching from kindergarten through higher education. The public and the Wisconsin legislature provided feedback for the writing committee to consider throughout Wisconsin’s academic standards review and revision process.

Business and Information Technology is an essential part of a comprehensive PK-12 education for all students and gives Wisconsin students a way to understand and empower themselves and their worlds. The knowledge, skills, and habits of mind gained through Business and Information Technology education in Wisconsin schools support the Wisconsin Department of Public Instruction’s vision of engaged learners creating a better Wisconsin together. Wisconsin’s 2024 standards for Business and Information Technology also result in the following:

- Wisconsin students develop deep understandings as curious and capable learners, so they may experience joy and confidence in themselves.
- Wisconsin students develop proven practices and content.
- Wisconsin’s students are flexible and use the standards to understand the world and question and critique the world productively.
- Wisconsin’s students have expanded professional opportunities in a wide variety of careers.

The Wisconsin Department of Public Instruction will continue to build on this work to support implementation of the standards with resources for the field. I am excited to share the Wisconsin Standards for Business and Information Technology, which aims to build skills, knowledge, and engagement opportunities for all Wisconsin students.

Jill K. Underly, Ph.D., State Superintendent

Acknowledgements

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Wisconsin Standards for Business and Information Technology

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Section I

Wisconsin's Approach to Academic Standards

Purpose of the Document

The purpose of this document is to improve Business and Information Technology education for students and for communities. The Wisconsin Department of Public Instruction (DPI) has developed standards to assist Wisconsin educators and community members in understanding, developing, and implementing course offerings and curriculum in school districts across Wisconsin.

This publication provides a vision for student success and follows [The Guiding Principles for Teaching and Learning \(2011\)](#). In brief, the principles are:

1. Every student has the right to learn.
2. Instruction must be rigorous and relevant.
3. Purposeful assessment drives instruction and affects learning.
4. Learning is a collaborative responsibility.
5. Students bring strengths and experiences to learning.
6. Responsive environments engage learners.

Program leaders will find the standards valuable for making decisions about:

- Program structure and integration
- Curriculum redesign
- Staffing and staff development
- Scheduling and student grouping
- Facility organization
- Learning spaces and materials development
- Resource allocation and accountability

- Collaborative work with other units of the school, district, and community

What Are Academic Standards?

Wisconsin Academic Standards specify what students should know and be able to do. They serve as goals for teaching and learning. Setting high standards enables students, parents, educators, and citizens to know what students should have learned at a given point in time. In Wisconsin, all state standards serve as a model. Locally elected school boards adopt academic standards in each subject area to best serve their local communities. We must ensure that all children have equal access to high-quality education programs. Clear statements about what students must know and be able to do are essential in making sure our schools offer opportunities to get the knowledge and skills necessary for success beyond the classroom.

Adopting these standards is voluntary. Districts may use the academic standards to develop local grade-by-grade-level curriculum. Implementing standards may require some school districts to upgrade school and district curricula. This may result in changes in instructional methods and materials, local assessments, and professional development opportunities for the teaching and administrative staff.

What is the Difference Between Academic Standards and Curriculum?

Standards are statements about what students should know and be able to do, what they might be asked to do to give evidence of learning, and how well they should be expected to know or do it. Curriculum is the program devised or adopted by local school districts used to prepare students to meet standards. It consists of activities and lessons at each grade level, instructional materials, and various instructional techniques. In short, standards define what is to be learned at certain points in time, and from a broad perspective, what performances will be accepted as evidence that the learning has occurred. Curriculum specifies the details of the day-to-day schooling at the local level.

Developing the Academic Standards

DPI has a transparent and comprehensive process for reviewing and revising academic standards. The process begins with a notice of intent to review an academic area with a public comment period. The State Superintendent's Academic Standards Review Council examines those comments and may recommend revision or development of standards in that academic area. The state superintendent authorizes whether or not to pursue a revision or development process. Following this, a state writing committee is formed to work on those standards for all grade levels. That draft is then made available for open review to get feedback from the public, key stakeholders, educators, and the legislature with further review by the State Superintendent's Academic Standards Review Council. The state superintendent then determines adoption of the standards.

Aligning for Student Success

To build and sustain schools that support every student in achieving success, educators must work together with caregivers, community members, and business partners to connect the most promising practices in the most meaningful contexts. The release of the Wisconsin Standards for Business and Information Technology provides a set of important academic standards for school districts to implement. This is connected to a larger vision of engaged learners creating a better Wisconsin together. Academic standards work together with other critical principles and efforts to educate every child to be an engaged learner capable of creating a better Wisconsin together. Here, the vision and Guiding Principles form the foundation for building a supportive process for teaching and learning rigorous and relevant content. The following sections articulate this integrated approach to increasing student success in Wisconsin schools and communities.

Relating the Academic Standards to All Students

Academic standards should allow ALL students to engage, access, and be assessed in ways that fit their strengths, needs, and interests. This applies to students with individualized education plans (IEPs), English learners, and gifted and talented pupils, consistent with all other students. Academic standards serve as a foundation for individualized programming decisions for all students.

Academic standards serve as a valuable basis for establishing concrete, meaningful goals for each student’s developmental progress and demonstration of proficiency. Students with IEPs must be provided specially designed instruction that meets their individual needs. It is expected that each individual student with an IEP will require unique services and supports matched to their strengths and needs in order to close achievement gaps in grade-level standards. Alternate standards are only available and appropriate for students with the most significant cognitive disabilities.

Gifted and talented students may achieve well beyond the academic standards and move into advanced grade levels or into advanced coursework.

Our Vision: Engaged Learners Creating a Better Wisconsin Together

We are committed to ensuring every child graduates from high school academically prepared and socially and emotionally competent. A successful Wisconsin student is proficient in academic content and can apply their knowledge through skills such as critical thinking, communication, collaboration, and creativity. The successful student will also possess critical habits such as perseverance, responsibility, adaptability, and leadership. This vision for every child as an engaged learner guides our beliefs and approaches to education and to creating a better Wisconsin together.

Guided by Principles

All educational initiatives are guided and impacted by important and often unstated attitudes or principles for teaching and learning. The Guiding Principles for Teaching and Learning (2011) were drawn from research and provide the touchstone for practices that truly affect the vision of “Engaged learners creating a better Wisconsin together.” When made transparent, these principles inform what happens in the classroom, direct the implementation and evaluation of programs, and most importantly, remind us of our own beliefs and expectations for students.

Engaging Learners Through Career Readiness

When educators connect their students’ learning to future career opportunities, they begin to engage students in a very personal and powerful way. In addition to career readiness as a strategy to engage learners, it is also a conduit through which every student in Wisconsin, including students with an IEP, can graduate from high school with the knowledge, skills, and abilities needed to be successful in their chosen career pathway. Regardless of the postsecondary path that a graduate pursues immediately after their K-12 education, we believe in preparing all students to be lifelong learners and acknowledge that one’s education and career path are inextricably linked.

The Wisconsin Career Readiness Standards (WCRS) provide the framework for educators to integrate career-readiness skills across all disciplines and at every grade level from K-12. Because people begin to develop interests and biases at an early age, it is important to start integrating WCRS in the elementary grades. By middle school, students may have already developed beliefs about their abilities related to careers. In addition, they may have formed stereotypes about which careers are appropriate for a particular gender, race, or socioeconomic background. Exposing students to careers and helping them develop skills related to careers when they are young is one way to keep students’ minds open to all possibilities.

Implementing the Wisconsin Career Readiness Standards may look different for every teacher, every program, every course, and potentially every unit or lesson. These standards were designed to be naturally and intentionally integrated into other discipline standards.

Ensuring a Process for Student Success

For Wisconsin schools and districts, implementing the [Framework for Equitable Multi-Level Systems of Supports \(2017\)](#) means providing equitable services, practices, and resources to every learner based upon responsiveness to effective instruction and intervention. In this system, high-quality instruction, strategic use of data, and collaboration interact within a continuum of supports to facilitate learner success. Schools provide varying types of supports with differing levels of intensity to proactively

and responsibly adjust to the needs of the whole child. These include the knowledge, skills, and habits learners need for success beyond high school, including developmental, academic, behavioral, social, and emotional skills.

Connecting to Content: Wisconsin Academic Standards

Within this vision for increased student success, rigorous, internationally benchmarked academic standards provide the content for high-quality curriculum and instruction and for a strategic assessment system aligned to those standards. With the adoption of the standards, Wisconsin has the tools to design curriculum, instruction, and assessments to maximize student learning. The standards articulate what we teach so that educators can focus on how instruction can best meet the needs of each student. When implemented within an equitable multilevel system of support, the standards can help to ensure that every child will graduate prepared for college and career.



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

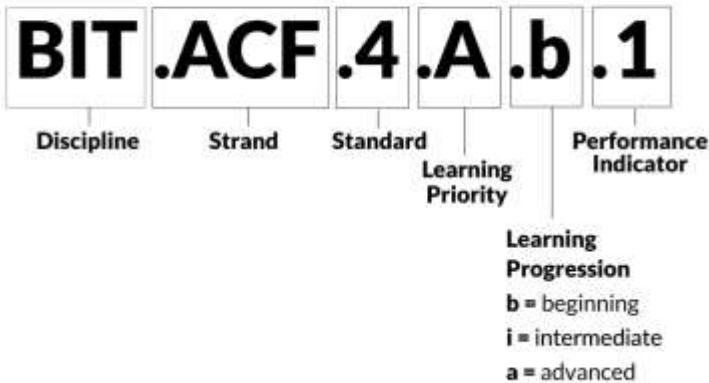
- **Discipline:** CTE program area
- **Strand:** Instructional topic within the discipline
- **Standard:** Broad statement that tells what students are expected to know or be able to do
- **Learning Priority:** Breaks down the broad statement into manageable learning pieces
- **Performance Indicator 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



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.

Section III

Discipline: Business and Information Technolo





Strand: Accounting and Finance (ACF)



Standard: BIT.ACF.1

Students will understand and apply the various steps of the accounting cycle and comprehend the purpose of each step.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.ACF.1.A: Apply the various steps of the accounting cycle for different types of business formations.	BIT.ACF.1.A.b.1: Define accounting, the purpose of the accounting system, and how current events impact the accounting profession.	BIT.ACF.1.A.i.1: Describe and explain the conceptual framework of accounting and Generally Accepted Accounting Principles (GAAP) and assumptions.	BIT.ACF.1.A.a.1: Distinguish between the accrual basis of accounting and the cash basis of accounting and discuss the impact each has on financial statements.
	BIT.ACF.1.A.b.2: Explain the concept of liquidity.	BIT.ACF.1.A.i.2: Discuss the purpose of the elements of the financial statements: assets, liabilities, owner's equity, revenues, expenses, and net income/loss.	BIT.ACF.1.A.a.2: Prepare a trial balance to determine necessary adjusting entries, including accruals and deferrals.
	BIT.ACF.1.A.b.3: Compare and contrast the advantages and disadvantages of the forms of business ownership (sole proprietorships, partnerships, and the various types of corporations).	BIT.ACF.1.A.i.3: Analyze and interpret business transactions and their effect on the accounting equation.	
		BIT.ACF.1.A.i.4: Journalize and post adjusting and closing entries.	BIT.ACF.1.A.a.4: Use special journals and subsidiary ledgers.

	BIT.ACF.1.A.b.5: Use a numeric ten-key pad.	BIT.ACF.1.A.i.5: Use an accounting software to record business transactions.	
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Standard: **BIT.ACF.2**

Students will utilize Generally Accepted Accounting Principles (GAAP) to determine the value of assets, liabilities, owner’s equity, revenues, and expenses.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.ACF.2.A: Analyze the effects of changes in assets.	BIT.ACF.2.A.b.1: Define assets and identify various types.	BIT.ACF.2.A.i.1: Explain the purpose of notes receivable.	BIT.ACF.2.A.a.1: Journalize and post accounts receivable transactions.
	BIT.ACF.2.A.b.2: Recognize items a business owns.	BIT.ACF.2.A.i.2: Differentiate current and long-term assets, and analyze their effect on financial statements.	BIT.ACF.2.A.a.2: Compare and contrast inventory and costing procedures (periodic and perpetual).
	BIT.ACF.2.A.b.3: Reconcile a bank statement.	BIT.ACF.2.A.i.3: Identify and apply cash control techniques.	BIT.ACF.2.A.a.3: Calculate and record depreciation and depletion.
			BIT.ACF.2.A.a.4: Account for the investment, the use, and the disposition of noncurrent operating assets
BIT.ACF.2.B: Analyze the effects of changes in liabilities.	BIT.ACF.2.B.b.1: Recognize items a business owns.	BIT.ACF.2.B.i.1: Differentiate between current liabilities, long-term liabilities, and their impact on financial statements.	BIT.ACF.2.B.a.1: Journalize and post accounts payable transactions.
	BIT.ACF.2.B.b.2: Define liabilities and identify various types.	BIT.ACF.2.B.i.2: Explain the purpose of notes payable.	BIT.ACF.2.B.a.2: Calculate the cost of borrowed funds.

Standard: BIT.ACF.2

Students will utilize Generally Accepted Accounting Principles (GAAP) to determine the value of assets, liabilities, owner's equity, revenues, and expenses.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.ACF.2.C: Analyze the effects of changes in owner's equity.	BIT.ACF.2.C.b.1: Define revenue.	BIT.ACF.2.C.i.1: Discuss the purpose of various owner's equity accounts as they relate to the business ownership structure.	BIT.ACF.2.C.a.1: Journalize and post transactions related to equity accounts.
	BIT.ACF.2.C.b.2: Define expense.	BIT.ACF.2.C.i.2: Identify the components of owner's equity and their effects on financial statements.	BIT.ACF.2.C.a.2: Demonstrate appropriate accounting techniques used to account for investments and withdrawals by owners.
			BIT.ACF.2.C.a.3: Interpret financial data to determine the revenue of a business.
		BIT.ACF.2.C.i.4: Account for long-term investments (bonds).	BIT.ACF.2.C.a.4: Distinguish between capital expenditures and revenue expenditures.

Standard: BIT.ACF.3

Students will analyze, interpret, and construct financial reports to determine financial position.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.ACF.3.A: Prepare and analyze financial reports for different forms of business ownership.	BIT.ACF.3.A.b.1: Explore the budget process for a business.	BIT.ACF.3.A.i.1: Prepare a budget for a business.	BIT.ACF.3.A.a.1: Track and make adjustments to budget performance.
	BIT.ACF.3.A.b.2: Discuss the three basic types of business activities—operating, investing, and financing.	BIT.ACF.3.A.i.2: Prepare financial statements for various forms of business ownership.	BIT.ACF.3.A.a.2: Create financial reports using spreadsheet and accounting software.
		BIT.ACF.3.A.i.3: Prepare and analyze cash flow statement.	BIT.ACF.3.A.a.3: Use data to forecast business projections.
BIT.ACF.3.B: Assess the financial condition and operating results of a company while interpreting financial statements.			BIT.ACF.3.B.a.1: Describe the information provided in each statement and how they articulate with each other.
			BIT.ACF.3.B.a.2: Recognize the primary areas of analysis (trend analysis, profitability, capital structure) and explain the information that can be obtained from each type of analysis.
		BIT.ACF.3.B.i.1: Use software to generate charts and graphs to analyze the financial condition of the business.	BIT.ACF.3.B.a.3: Evaluate financial statements using horizontal and vertical analysis and commonly used financial ratios.

Standard: BIT.ACF.3

Students will analyze, interpret, and construct financial reports to determine financial position.

	BIT.ACF.3.B.b.1: Discuss accounting control procedures for different types of business ownership.	BIT.ACF.3.B.i.2: Discuss the importance of integrity, confidentiality, and high ethical standards in the preparation of financial statements.	BIT.ACF.3.B.a.4: Analyze financial data to make short-term and long-term decisions.

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.
		BIT.ACF.4.B.i.2: Describe the composition of taxable income and calculate tax.	BIT.ACF.4.B.a.2: Identify and apply strategies for minimizing taxable business income.

Strand: Business Communications (BC)

Standard: BIT.BC.1

Students will develop foundational communication skills.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.BC.1.A: Students will use active listening skills.	BIT.BC.1.A.b.1: Describe traits of an active listener.	BIT.BC.1.A.i.1: Determine if more information is needed and ask appropriate questions.	BIT.BC.1.A.a.1: Formulate judgments about the ideas under discussion and support those judgments with convincing evidence.
	BIT.BC.1.A.b.2: Summarize a classroom discussion.	BIT.BC.1.A.i.2: Take complete and accurate notes.	BIT.BC.1.A.a.2: Listen carefully to separate fact from opinion.
	BIT.BC.1.A.b.3: Listen attentively to guest speakers.	BIT.BC.1.A.i.3: Interview people to learn about a topic and write a summary.	BIT.BC.1.A.a.3: Identify and overcome barriers to enhance active listening.
	BIT.BC.1.A.b.4: Take simple notes.	BIT.BC.1.A.i.4: Interpret verbal and nonverbal cues in spoken messages.	BIT.BC.1.A.a.4: Direct courteous attention to multiple speakers within a group to obtain key facts.
	BIT.BC.1.A.b.5: Follow spoken directions.	BIT.BC.1.A.i.5: Provide and request appropriate feedback.	BIT.BC.1.A.a.5: Analyze and evaluate the intent of a message.
			BIT.BC.1.A.a.6: Synthesize information from multiple sources to think critically during decision-making.

Standard: BIT.BC.1

Students will develop foundational communication skills.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.BC.1.B: Students will apply the basic communication process.	BIT.BC.1.B.b.1: Compose and speak simple responses to questions.	BIT.BC.1.B.i.1: Respond to questions directly and appropriately.	BIT.BC.1.B.a.1: Compose and speak complex responses to questions for both sides of a question or issue.
	BIT.BC.1.B.b.2: Identify word usage in a spoken or written sentence.	BIT.BC.1.B.i.2: Demonstrate awareness to language bias.	BIT.BC.1.B.a.2: Use standardized English when speaking and writing, avoiding the use of expletive, slang, jargon, and technical terms.
	BIT.BC.1.B.b.3: Demonstrate contextually appropriate use of the convention of standardized English spelling, grammar, and word usage.	BIT.BC.1.B.i.3: Gather appropriate information in order to deliver an accurate and concise message.	BIT.BC.1.B.a.3: Use effective techniques when delivering a formal written or spoken presentation, including identifying the intended audience.
	BIT.BC.1.B.b.4: Determine the purpose and form for a message.	BIT.BC.1.B.i.4: Determine if technology will impact the delivery of the message.	BIT.BC.1.B.a.4: Evaluate messages from different perspectives to ensure transfer of meaning.
BIT.BC.1.C: Students will appropriately and effectively use technology in the communication process.	BIT.BC.1.C.b.1: Explore a digital resource and summarize the content.	BIT.BC.1.C.i.1: Evaluate messages and select the appropriate technology for transmitting them.	BIT.BC.1.C.a.1: Compose and evaluate formal and informal digital correspondence.
	BIT.BC.1.C.b.2: Discuss rules of safe and appropriate conduct while communicating digitally.	BIT.BC.1.C.i.2: Create professional email communication to request or share information.	BIT.BC.1.C.a.2: Participate in a digital discussion board related to a given topic.

Standard: BIT.BC.1

Students will develop foundational communication skills.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.BC.1.C.b.3: Recognize the multiple ways that mobile technologies are used for both personal and professional communication.	BIT.BC.1.C.i.3: Participate in a virtual conference or meeting.	BIT.BC.1.C.a.3: Use digital libraries and other resources to find information to write a research paper with contextually appropriate cited sources.
	BIT.BC.1.C.b.4: Role-play answering and using a phone to communicate effectively.	BIT.BC.1.C.i.4: Compose, deliver, and publish documents digitally.	BIT.BC.1.C.a.4: Compare and contrast virtual and face-to-face collaboration.
	BIT.BC.1.C.b.5: Identify appropriate etiquette when communicating using technology.	BIT.BC.1.C.i.5: Collaborate with others through technology to acquire and share information.	BIT.BC.1.C.a.5: Collaborate online with peers to complete and publish a group project.
	BIT.BC.1.C.b.6: Use basic applications for word processing, spreadsheets, or presentations to communicate a message.	BIT.BC.1.C.i.6: Evaluate examples of contextually appropriate and inappropriate voicemail greetings and messages to determine effectiveness.	BIT.BC.1.C.a.6: Use social media to communicate effectively with various audiences.
		BIT.BC.1.C.i.7: Recognize the importance of response timeliness and accuracy when using a digital platform.	BIT.BC.1.C.a.7: Critique asynchronous and synchronous collaboration tools.
		BIT.BC.1.C.i.8: Integrate functions of word processing, spreadsheets, or presentation tools to multiple scenarios.	BIT.BC.1.C.a.8: Evaluate techniques to protect confidential messages that are sent digitally.

Standard: BIT.BC.1

Students will develop foundational communication skills.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.BC.1.D: Students will participate in the reading and research process.	BIT.BC.1.D.b.1: Describe why it is not right to copy other people’s work.	BIT.BC.1.D.i.1: Explain ownership and use of digitally generated information.	BIT.BC.1.D.a.1: Document property, both print and digital sources, to avoid plagiarism and cite sources in proper format.
	BIT.BC.1.D.b.2: Use digital resource tools to cite sources effectively.	BIT.BC.1.D.i.2: Evaluate digital sources to determine authorship, validity, and relevance.	BIT.BC.1.D.a.2: Plan, research, and write business-specific reports that incorporate graphic aids.
	BIT.BC.1.D.b.3: Recognize why sources of text and images need to be cited.	BIT.BC.1.D.i.3: Present researched information in a meaningful format, citing sources of text and images.	BIT.BC.1.D.a.3: Interpret information from multiple primary and secondary sources.
	BIT.BC.1.D.b.4: Read for both information and for enjoyment.	BIT.BC.1.D.i.4: Read critically to take accurate notes.	BIT.BC.1.D.a.4: Apply various close reading strategies that are appropriate for the content.
	BIT.BC.1.D.b.5: Read and follow directions.	BIT.BC.1.D.i.5: Demonstrate effective research techniques.	BIT.BC.1.D.a.5: Analyze and evaluate the validity, reliability, and accuracy of both primary and secondary sources.
	BIT.BC.1.D.b.6: Demonstrate reading comprehension through summarizing techniques.	BIT.BC.1.D.i.6: Use contextual clues to recognize word meaning.	BIT.BC.1.D.a.6: Evaluate the impact of misleading or false information.

Standard: BIT.BC.2

Students will develop social communication skills.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.BC.2.A: Students will demonstrate professionalism and business etiquette during the communication process.	BIT.BC.2.A.b.1: Recognize nonverbal messages.	BIT.BC.2.A.i.1: Give examples of nonverbal messages that have different meanings.	BIT.BC.2.A.a.1: Research and participate in a presentation on the customs and cultures of a different country.
	BIT.BC.2.A.b.2: Discuss the importance of appropriate manners and etiquette.	BIT.BC.2.A.i.2: Demonstrate appropriate manners and etiquette when interacting with people from diverse backgrounds.	BIT.BC.2.A.a.2: Compare and contrast effective communication methods with diverse cultural organizations.
	BIT.BC.2.A.b.3: Recognize contextually appropriate etiquette when using the phone.	BIT.BC.2.A.i.3: Analyze situations in which communication can positively or negatively impact customer service.	BIT.BC.2.A.a.3: Participate in group discussions or role play customer-service problem resolutions.
	BIT.BC.2.A.b.4: Develop a respect and awareness of diversity.	BIT.BC.2.A.i.4: Practice contextually appropriate etiquette when using a phone to communicate.	BIT.BC.2.A.a.4: Integrate consistent use of contextually appropriate etiquette when using the phone to communicate.
	BIT.BC.2.A.b.5: Demonstrate the ability to collaborate with peers and colleagues.	BIT.BC.2.A.i.5: Explain the value and impact of interpersonal relationships in a business environment.	BIT.BC.2.A.a.5: Establish an understanding and respect for the customs and communication styles of diverse cultures.
	BIT.BC.2.A.b.6: Respect the rights and acknowledge the opinions of others.	BIT.BC.2.A.i.6: Present the impact of effective communication on your	BIT.BC.2.A.a.6: Engage in meaningful conversations in a professional environment.



Standard: BIT.BC.2

Students will develop social communication skills.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		professional image.	
	BIT.BC.2.A.b.7: Recognize the value of a responsible social media presence.	BIT.BC.2.A.i.7: Describe strategies for communicating with co-workers.	BIT.BC.2.A.a.7: Create work products that communicate a professional image.
BIT.BC.2.B: Students will demonstrate collaborative communication with others when in a leadership role.	BIT.BC.2.B.b.1: Demonstrate the ability to work effectively as a member of a small group.	BIT.BC.2.B.i.1: Explain the importance of creating and sharing an agenda prior to a meeting.	BIT.BC.2.B.a.1: Demonstrate the ability to resolve conflict in a group.
	BIT.BC.2.B.b.2: Identify the characteristics of an effective leader.	BIT.BC.2.B.i.2: Demonstrate leadership skills when working in a group.	BIT.BC.2.B.a.2: Model appropriate behavior when collaborating with others.
	BIT.BC.2.B.b.3: Participate in a meeting.	BIT.BC.2.B.i.3: Describe the importance of involving all meeting participants in any meeting setting.	BIT.BC.2.B.a.3: Facilitate group decision-making and goal setting.
	BIT.BC.2.B.b.4: Identify ways to communicate appropriately with others.	BIT.BC.2.B.i.4: Establish team goals and objectives.	BIT.BC.2.B.a.4: Establish meeting norms that lead to group success.
	BIT.BC.2.B.b.5: Explain the importance of being able to work with other people.	BIT.BC.2.B.i.5: Explain the disadvantage of groupthink when collaborating as a team.	BIT.BC.2.B.a.5: Assess methods that can be used in a group to eliminate groupthink.

Standard: BIT.BC.3

Students will develop effective written communication skills.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.BC.3.A: Students will demonstrate contextually appropriate writing techniques and mechanics.	BIT.BC.3.A.b.1: Identify the parts of speech.	BIT.BC.3.A.i.1: Write simple and compound sentences effectively.	BIT.BC.3.A.a.1: Proofread, edit, and revise written work using vocabulary specific to various topics.
	BIT.BC.3.A.b.2: Expand vocabulary as needed when writing at grade level.	BIT.BC.3.A.i.2: Expand vocabulary as needed to continue writing at grade level.	BIT.BC.3.A.a.2: Recognize and write effective and grammatically appropriate complex sentences and paragraphs.
	BIT.BC.3.A.b.3: Apply contextually appropriate grammar, number usage, and spelling in written formats.	BIT.BC.3.A.i.3: Recognize grammar and spelling mistakes and use proofreader's marks to correct the errors.	BIT.BC.3.A.a.3: Analyze ethical implications of misleading or inaccurate written messages.
	BIT.BC.3.A.b.4: Identify steps in the writing process.	BIT.BC.3.A.i.4: Compose an appropriate message for specific audiences.	BIT.BC.3.A.a.4: Edit and revise written work to improve content and effectiveness.
	BIT.BC.3.A.b.5: Compose a personal message using sentences and paragraphs.	BIT.BC.3.A.i.5: Demonstrate sensitivity to language bias.	BIT.BC.3.A.a.5: Use bias-free language that reflects cultural sensitivity.
	BIT.BC.3.A.b.6: Develop an outline to demonstrate writing logic.	BIT.BC.3.A.i.6: Document print and digital sources accurately to avoid plagiarism.	BIT.BC.3.A.a.6: Compare draft writing to final writing to ensure accuracy of edits.
BIT.BC.3.B: Students will prepare concise, professional, and accurate business messages and documents.	BIT.BC.3.B.b.1: Write a thank you note.	BIT.BC.3.B.i.1: Define biased language.	BIT.BC.3.B.a.1: Proofread and edit business documents to ensure they are clear, concise, and consistent.
	BIT.BC.3.B.b.2: Write a	BIT.BC.3.B.i.2: Write a thank	BIT.BC.3.B.a.2: Compose a



Standard: BIT.BC.3

Students will develop effective written communication skills.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	request for information.	you letter or email for a specific event.	variety of business documents for multiple situations.
	BIT.BC.3.B.b.3: Compose a simple report.	BIT.BC.3.B.i.3: Determine the difference between a formal and informal report.	BIT.BC.3.B.a.3: Develop formal and informal reports.
	BIT.BC.3.B.b.4: Prepare a set of instructions on how to complete a task.	BIT.BC.3.B.i.4: Develop a meeting agenda.	BIT.BC.3.B.a.4: Prepare an industry-specific technical report with graphics.
	BIT.BC.3.B.b.5: Create a simple presentation.	BIT.BC.3.B.i.5: Compose a personal business letter.	BIT.BC.3.B.a.5: Compose a formal business letter.
	BIT.BC.3.B.b.6: Create a promotional document.	BIT.BC.3.B.i.6: Practice revising poorly written business communication.	BIT.BC.3.B.a.6: Evaluate and revise poorly written business messages.
	BIT.BC.3.B.b.7: Read a chart or a graph.	BIT.BC.3.B.i.7: Recognize when a direct, indirect, or persuasive message is used.	BIT.BC.3.B.a.7: Develop direct, indirect, and persuasive messages for appropriate situations.
	BIT.BC.3.B.b.8: Recognize the difference between a positive and a negative message.	BIT.BC.3.B.i.8: Prepare communication that conveys both positive and negative messaging.	BIT.BC.3.B.a.8: Compose specialized messages and documents for decision-making and problem-solving.
		BIT.BC.3.B.i.9: Create summaries or reports that use appropriate documentation styles.	BIT.BC.3.B.a.9: Analyze and evaluate complex business case studies involving communication.

Standard: BIT.BC.4

Students will develop effective spoken communication skills.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.BC.4.A: Students will demonstrate basic speaking skills and techniques.	BIT.BC.4.A.b.1: Recognize various nonverbal signals.	BIT.BC.4.A.i.1: Interpret nonverbal signals appropriately.	BIT.BC.4.A.a.1: Respond appropriately to nonverbal signals.
	BIT.BC.4.A.b.2: Participate in group discussions and role-playing.	BIT.BC.4.A.i.2: Model effective communication group discussions and role-playing.	BIT.BC.4.A.a.2: Participate in effective group discussions and role-playing, defending both sides of an issue.
	BIT.BC.4.A.b.3: Express needs and wants verbally.	BIT.BC.4.A.i.3: Organize thoughts to reflect logical thinking.	BIT.BC.4.A.a.3: Lead logical and complex discussions.
	BIT.BC.4.A.b.4: Ask appropriate questions.	BIT.BC.4.A.i.4: Determine when more information is needed and ask appropriate questions.	BIT.BC.4.A.a.4: Ask questions with confidence to elicit more information.
	BIT.BC.4.A.b.5: Compose and speak simple responses to questions.	BIT.BC.4.A.i.5: Respond to questions directly and appropriately.	BIT.BC.4.A.a.5: Compose and speak complex responses to questions for both sides of a question or issue.
	BIT.BC.4.A.b.6: Identify word usage in a sentence.	BIT.BC.4.A.i.6: Demonstrate awareness of language bias.	BIT.BC.4.A.a.6: Demonstrate an acceptance of regional cultural differences in spoken communication.
	BIT.BC.4.A.b.7: Explain the difference between enunciation and pronunciation.	BIT.BC.4.A.i.7: Discuss the importance of appropriate word selection and usage when speaking.	BIT.BC.4.A.a.7: Use standardized English when speaking, avoiding the use of expletives, slang, jargon, vocal segregates, and



Standard: BIT.BC.4

Students will develop effective spoken communication skills.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			technical terms.
		BIT.BC.4.A.i.8: Demonstrate basic interview skills in a mock interview.	BIT.BC.4.A.a.8: Demonstrate appropriate interviewing techniques in mock employment interviews.
		BIT.BC.4.A.i.9: Explain appropriate strategies for communicating in face-to-face conversations.	BIT.BC.4.A.a.9: Interact effectively and use culturally sensitive language when talking with other individuals, including people from various backgrounds.
BIT.BC.4.B: Students will demonstrate the ability to deliver appropriate and effective presentations.	BIT.BC.4.B.b.1: Prepare and deliver a short speech.	BIT.BC.4.B.i.1: Prepare and deliver a speech in front of a small group.	BIT.BC.4.B.a.1: Prepare and deliver a presentation in professional attire to a large group of people using visual aids to enhance the presentation.
	BIT.BC.4.B.b.2: Create simple visual aids to use in a presentation.	BIT.BC.4.B.i.2: Demonstrate appropriate techniques to organize a speech or presentation.	BIT.BC.4.B.a.2: Use effective techniques to deliver professional business presentations.
		BIT.BC.4.B.i.3: Demonstrate contextually appropriate spelling, grammar, word usage, and legible writing.	BIT.BC.4.B.a.3: Use contextually appropriate techniques when delivering a formal presentation, including analyzing the use of fillers.
	BIT.BC.4.B.b.4: Collaborate	BIT.BC.4.B.i.4: Identify	BIT.BC.4.B.a.4: Implement

Standard: BIT.BC.4

Students will develop effective spoken communication skills.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	with a small group to create a team presentation.	techniques to maintain audience attention during a presentation.	the use of audio, video, or handouts to enhance a presentation.
	BIT.BC.4.B.b.5: Write a short story as a member of a group and perform it.	BIT.BC.4.B.i.5: Use digital collaboration tools to plan with group members.	BIT.BC.4.B.a.5: Complete a group project using digital collaboration and present findings.
	BIT.BC.4.B.b.6: Attend a virtual conference.	BIT.BC.4.B.i.6: Actively participate in a digital conference presentation.	BIT.BC.4.B.a.6: Create and deliver a digital conference and/or presentation.
	BIT.BC.4.B.b.7: Be an active member at a group meeting.	BIT.BC.4.B.i.7: Attend a school board or community-based organization meeting.	BIT.BC.4.B.a.7: Preside at meetings and demonstrate basic parliamentary procedure.
	BIT.BC.4.B.b.8: Describe what an impromptu speech is.	BIT.BC.4.B.i.8: Present a brief informative impromptu speech.	BIT.BC.4.B.a.8: Deliver a persuasive impromptu presentation.
	BIT.BC.4.B.b.9: Identify possible difficulties when delivering a speech or presentation with or without technology.	BIT.BC.4.B.i.9: Practice effective strategies to manage anxiety or nervousness during a presentation.	BIT.BC.4.B.a.9: React appropriately and engage problem-solving skills when technical difficulties are experienced during a presentation.

Standard: BIT.BC.5

Students will develop effective communication skills to support success in the workplace.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.BC.5.A: Students will demonstrate successful employment communication skills.	BIT.BC.5.A.b.1: Discuss basic communication skills used on various jobs.	BIT.BC.5.A.i.1: Identify negotiation strategies to resolve a conflict.	BIT.BC.5.A.a.1: Demonstrate effective negotiation skills.
	BIT.BC.5.A.b.2: Outline the parts of a resume.	BIT.BC.5.A.i.2: Write a simple resume for a simulated job opportunity.	BIT.BC.5.A.a.2: Create a digitally accessible and print version of a resume.
	BIT.BC.5.A.b.3: Identify online and print sources to locate job opportunities.	BIT.BC.5.A.i.3: Develop a letter of application or cover letter.	BIT.BC.5.A.a.3: Write a formal application letter for job opportunities.
	BIT.BC.5.A.b.4: Identify online sources to use for preparing for a future career.	BIT.BC.5.A.i.4: Develop a portfolio containing career research materials.	BIT.BC.5.A.a.4: Develop a digital portfolio containing career research materials for at least one career pathway.
	BIT.BC.5.A.b.5: Create a list of potential job interview questions.	BIT.BC.5.A.i.5: Participate in an interview or role-play a simulated interview.	BIT.BC.5.A.a.5: Analyze characteristics of effective and ineffective interview procedures, questions, and responses.
	BIT.BC.5.A.b.6: Identify what it means to have a positive recommendation.	BIT.BC.5.A.i.6: Create a list of people who could be personal references.	BIT.BC.5.A.a.6: Obtain permission and create a list of professional references.
		BIT.BC.5.A.i.7: Describe appropriate questions a potential employee could ask an interviewer.	BIT.BC.5.A.a.7: Write a follow-up (thank you) letter or email for use after a job interview.
		BIT.BC.5.A.i.8: Discuss illegal and inappropriate interview questions.	BIT.BC.5.A.a.8: Present and role-play strategies for communicating with



Standard: BIT.BC.5

Students will develop effective communication skills to support success in the workplace.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			managers, co-workers, and customers or clients.
		BIT.BC.5.A.i.9: Identify appropriate strategies for accepting or rejecting a job offer.	BIT.BC.5.A.a.9: Develop a business proposal or business plan.
		BIT.BC.5.A.i.10: Discuss appropriate written and spoken communication when leaving employment under various circumstances.	BIT.BC.5.A.a.10: Document and format minutes from a business meeting.

Strand: Business Law and Ethics (BLE)

Standard: BIT.BLE.1

Students will assess the legal system in which they live and work.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.BLE.1.A: Analyze the sources of law.	BIT.BLE.1.A.b.1: Define and give examples of rules and laws and why they are important.	BIT.BLE.1.A.i.1: Describe the branches of government.	BIT.BLE.1.A.a.1: Summarize each branch of the federal, tribal, and state government and explain the importance of each.
	BIT.BLE.1.A.b.2: Explain the consequences of not having rules and laws.	BIT.BLE.1.A.i.2: Explain the purpose for a constitution and give examples of a constitution.	BIT.BLE.1.A.a.2: Outline how a constitution safeguards and limits an individual's rights.
	BIT.BLE.1.A.b.3: Give examples of people who have the authority to make and enforce rules and laws in the school and community.	BIT.BLE.1.A.i.3: Explain why laws are developed at the federal and state levels.	BIT.BLE.1.A.a.3: Explain how laws are developed at the federal, tribal, and state levels.
	BIT.BLE.1.A.b.4: Explain the primary sources of laws.	BIT.BLE.1.A.i.4: Describe why citizens are obligated to follow rules and laws and the consequences for not following rules and laws.	BIT.BLE.1.A.a.4: Interpret statutory law and identify the purposes of statutory law.
BIT.BLE.1.B: Summarize the structure of the court system.	BIT.BLE.1.B.b.1: Identify courtroom personnel.	BIT.BLE.1.B.i.1: Explain the function of the court system.	BIT.BLE.1.B.a.1: Argue the importance of the court system.

Standard: BIT.BLE.1

Students will assess the legal system in which they live and work.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.BLE.1.B.b.2: Identify local court locations.	BIT.BLE.1.B.i.2: Describe the roles of courtroom personnel.	BIT.BLE.1.B.a.2: Illustrate the structure of the federal and state court systems with appropriate jurisdiction.
	BIT.BLE.1.B.b.3: Describe the different levels of the court system.	BIT.BLE.1.A.i.3: Define administrative agencies and how administrative agencies get their power and the ability to create regulations.	BIT.BLE.1.B.a.3: Identify the types of cases heard in each of the federal and state courts and the difference between original and appellate jurisdiction.
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).
		BIT.BLE.1.C.i.4: Explain the role of precedent in the legal system.	BIT.BLE.1.C.a.4: Differentiate between negligence, strict liability, and intentional torts.

Standard: BIT.BLE.2

Students will interpret laws associated with business organizations, agency law, and employment law.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.BLE.2.A: Summarize the characteristics of owning and operating a business.	BIT.BLE.2.A.b.1: Describe sole proprietorship.	BIT.BLE.2.A.i.1: Explain why people start a new business.	BIT.BLE.2.A.a.1: Analyze the process for starting and operating a sole proprietorship.
	BIT.BLE.2.A.b.2: Explain partnership.	BIT.BLE.2.A.i.2: Describe how partnerships are created.	BIT.BLE.2.A.a.2: Distinguish among the different types of partners and describe the powers and duties of each type.
	BIT.BLE.2.A.b.3: Identify businesses in your community.	BIT.BLE.2.A.i.3: Analyze the different forms of business and explain the legal liability related to each form.	BIT.BLE.2.A.a.3: Identify how the partnership may be dissolved by the partners, operation of the law, and by the order of the court.
	BIT.BLE.2.A.b.4: Describe what it means to own a business.	BIT.BLE.2.A.i.4: Explain regulations relating to the operation of a business.	BIT.BLE.2.A.a.4: Summarize why a corporation is a legal entity.
		BIT.BLE.2.A.i.5: List and explain the steps in forming a corporation.	BIT.BLE.2.A.a.5: Describe the ways a corporation may be terminated.
			BIT.BLE.2.A.a.6: Summarize the role of franchises in the business environment.
BIT.BLE.2.B: Summarize the role and importance of agency law.	BIT.BLE.2.B.b.1: Define agency.	BIT.BLE.2.B.i.1: Explain the different types of agents.	BIT.BLE.2.B.a.1: List the ways an agency relationship can be created.



Standard: BIT.BLE.2

Students will interpret laws associated with business organizations, agency law, and employment law.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.BLE.2.B.b.1: Explain the different types of principals.	BIT.BLE.2.B.i.2: Distinguish among agents, independent contractors, bailees, brokers, and trustees.	BIT.BLE.2.B.a.2: Summarize the duties an agent owes to the principal and the duties the principal owes the agent.
BIT.BLE.2.C: Analyze the role of employment law.	BIT.BLE.2.C.b.1: Describe employment.	BIT.BLE.2.C.i.1: Explain employment at will.	BIT.BLE.2.C.a.1: Explain the wrongful discharge exceptions to employment at will.
	BIT.BLE.2.C.b.2: Examine the employer-employee relationship.	BIT.BLE.2.C.i.2: List and explain the rights and responsibilities of employees.	BIT.BLE.2.C.a.2: Summarize legislation that regulates employee rights and employment conditions.
		BIT.BLE.2.C.i.3: List and explain the rights and responsibilities of employers.	BIT.BLE.2.C.a.3: Examine justified and unjustified discrimination practices.
		BIT.BLE.2.C.i.4: Define “labor union” and the rights of workers.	BIT.BLE.2.C.a.4: Examine the history of labor unions, the legislation associated with labor unions, and how labor unions operate.

Standard: BIT.BLE.3

Students will evaluate the legal implications of contract law, law of sales, and consumer law.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.BLE.3.A: Demonstrate an understanding of contract law.	BIT.BLE.3.A.b.1: Define contract.	BIT.BLE.3.A.i.1: Identify and explain various types of contracts.	BIT.BLE.3.A.a.1: Demonstrate understanding of the contractual relationship, and explain the elements required to create a contract.
	BIT.BLE.3.A.b.2: Explain the importance of a contract.	BIT.BLE.3.A.i.2: Outline various parts of a simple contract.	BIT.BLE.3.A.a.2: Define “consideration” as it applies to contract law and list examples of valid consideration for both benefit and detriment.
		BIT.BLE.3.A.i.3: Evaluate contractual rights and responsibilities.	BIT.BLE.3.A.a.3: Explain how contractual rights and duties are created through offer and acceptance.
		BIT.BLE.3.A.i.4: Describe the types of consideration and justify the exceptions to the requirements of consideration.	BIT.BLE.3.A.a.4: Compare the classifications of contracts: valid, void, voidable, unenforceable, bilateral, unilateral, express, implied, oral, and written contracts.
		BIT.BLE.3.A.i.5: Discuss how to determine contractual capacity—minors, mentally impaired, intoxicated—and the implications of ratification.	BIT.BLE.3.A.a.5: Discuss the different ways a contract can be discharged or terminated: substantial performance, complete performance, mutual release, accord and satisfaction, and discharge by



Standard: BIT.BLE.3

Students will evaluate the legal implications of contract law, law of sales, and consumer law.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			operation of law.
		BIT.BLE.3.A.i.6: Define “breach of contract” and “legal remedies”: damages, specific performance, rescission, and restitution.	BIT.BLE.3.A.a.6: Identify contracts that should be in writing under the statute of frauds.
BIT.BLE.3.B: Interpret the legal issues involved with the sale of goods and consumer protection as they relate to consumer law.	BIT.BLE.3.B.b.1: Describe a “consumer.”	BIT.BLE.3.B.i.1: Discuss the rights, responsibilities, and protections of consumers.	BIT.BLE.3.B.a.1: Explain the two types of warranties for sale of goods: expressed and implied.
	BIT.BLE.3.B.b.2: Identify goods and services that are produced in the local community and state.	BIT.BLE.3.B.i.2: Contrast goods from services and real property.	BIT.BLE.3.B.a.2: Summarize the differences between a sale of goods and other transactions relating to goods.
	BIT.BLE.3.B.b.3: Define “sales.”	BIT.BLE.3.B.i.3: Explain the Uniform Commercial Code (UCC) and when to apply it.	BIT.BLE.3.B.a.3: List and explain consumer protection laws: Truth in Lending Act and Consumer Product Safety Act.

Standard: BIT.BLE.4

Students will analyze the legal aspects of personal property, real property, and intellectual/artistic property law.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.BLE.4.A: Evaluate laws and legal rules associated with personal property.		BIT.BLE.4.A.i.1: Define “personal property.”	BIT.BLE.4.A.a.1: Compare the classifications of property and assess why property distinctions are important.
		BIT.BLE.4.A.i.2: Identify types of personal property.	BIT.BLE.4.A.a.2: Analyze the various methods property is acquired.
		BIT.BLE.4.A.i.3: Analyze the various ways of holding ownership to property.	BIT.BLE.4.A.a.3: Evaluate forms of co-ownership of personal property.
			BIT.BLE.4.A.a.4: Illustrate common bailments.
BIT.BLE.4.B: Evaluate laws and legal rules associated with real property.		BIT.BLE.4.B.i.1: Define “real property.”	BIT.BLE.4.B.a.1: Compare and contrast liens, licenses, and easements.
		BIT.BLE.4.B.i.2: Explain a “lease.”	BIT.BLE.4.B.a.2: Categorize the various types of leases.
	BIT.BLE.4.B.b.1: Describe a “landlord.”	BIT.BLE.4.B.i.3: Outline the rights and duties of landlords and tenants.	BIT.BLE.4.B.a.3: Outline the rights and duties of landlords and tenants when terminating a lease.



Standard: **BIT.BLE.4**

Students will analyze the legal aspects of personal property, real property, and intellectual/artistic property law.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.BLE.4.C: Evaluate laws and legal rules associated with intellectual and artistic property.	BIT.BLE.4.C.b.1: Define “intellectual property.”	BIT.BLE.4.C.i.1: Summarize the types of intellectual property that are protected by law.	BIT.BLE.4.C.a.1: Examine the laws that protect intellectual property rights.
			BIT.BLE.4.C.a.2: Analyze intellectual property ethical case studies.
			BIT.BLE.4.C.a.3: Assess how intellectual property rights can be terminated or can be lost.

Standard: BIT.BLE.5

Students will analyze the roles of personal integrity, ethical behavior, and social responsibility in the workplace.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.BLE.5.A: Differentiate between ethical and legal issues in business relationships.	BIT.BLE.5.A.b.1: Define “ethics.”	BIT.BLE.5.A.i.1: Distinguish between business and personal ethics.	BIT.BLE.5.A.a.1: Compare and contrast ethical theories.
	BIT.BLE.5.A.b.2: Identify ethical character traits: honesty, integrity, and fairness.	BIT.BLE.5.A.i.2: Explain how a person’s values relate to ethical behavior.	BIT.BLE.5.A.a.2: Analyze ethical dilemmas.
	BIT.BLE.5.A.b.3: Communicate how to respect the privacy of others.	BIT.BLE.5.A.i.3: Describe how ethics and law are related.	BIT.BLE.5.A.a.3: Compare and contrast the consequences of unethical behavior with illegal behavior.
	BIT.BLE.5.A.b.4: Describe what it means to be responsible.	BIT.BLE.5.A.i.4: Define “corporate social responsibility.”	BIT.BLE.5.A.a.4: Analyze the role of values in constructing an ethical code that relates to the legal system.
	BIT.BLE.5.A.b.5: List ways in which a business’ actions could have both positive and negative impacts on a community.	BIT.BLE.5.A.i.5: Discuss methods in which a corporation can demonstrate social responsibility.	BIT.BLE.5.A.a.5: Describe ethics-related legislation (for example, Sarbanes-Oxley Act, etc.) and their impact on ethical business transactions.
		BIT.BLE.5.A.i.6: Identify ways in which businesses become involved with community projects.	BIT.BLE.5.A.a.6: Explain the role of corporate citizenship and its impact on society.

**Standard: BIT.BLE.5**

Students will analyze the roles of personal integrity, ethical behavior, and social responsibility in the workplace.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		BIT.BLE.5.A.i.7: Distinguish between business ethics and social responsibility.	BIT.BLE.5.A.a.7: Illustrate the long-term impact of corporate social responsibility to the environment.

Strand: Digital Communications and Media (DCM)**Standard: BIT.DCM.1**

Students will create publish-quality media for intended audiences or purposes through the use of advanced layout, design, and graphics production software and hardware.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.DCM.1.A: Prepare documents for publishing to web, print, and other digital devices.	BIT.DCM.1.A.b.1: Create a document or digital media piece with text, page border, and digital images.	BIT.DCM.1.A.i.1: Create a document or publication incorporating text, columns, graphics, borders, and shading.	BIT.DCM.1.A.a.1: Design and create complex, multipart, digital media publications.
	BIT.DCM.1.A.b.2: Insert graphic elements to enhance digital media, documents, or publications.	BIT.DCM.1.A.i.2: Create publications using templates.	BIT.DCM.1.A.a.2: Use technical skills, for printed and digital media, to produce publishable materials.



Standard: BIT.DCM.1

Students will create publish-quality media for intended audiences or purposes through the use of advanced layout, design, and graphics production software and hardware.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.DCM.1.A.b.3: Explore current and emerging digital media.	BIT.DCM.1.A.i.3: Use styles to apply layout and design concepts to create publications in digital or print format.	BIT.DCM.1.A.a.3: Import and export text, data, and graphics between software programs.
	BIT.DCM.1.A.b.4: Identify and select appropriate delivery methods and tools for digital media projects.	BIT.DCM.1.A.i.4: Identify and use common typographic adjustments to create contrast, hierarchy, and enhanced readability.	BIT.DCM.1.A.a.4: Analyze the impact of digital media on society.
BIT.DCM.1.B: Design, create, and deliver digital presentations.	BIT.DCM.1.B.b.1: Create and deliver a digital presentation.	BIT.DCM.1.B.i.1: Import digital images, audio files, and video files into presentations.	BIT.DCM.1.B.a.1: Create media-rich presentations for a target audience, incorporating digital images, audio, and video files.
	BIT.DCM.1.B.b.2: Prepare presentations for collaboration and distribution.		BIT.DCM.1.B.a.2: Convert data between media and file formats.
	BIT.DCM.1.B.b.3: Create an edited video sequence from captured digital image files.		BIT.DCM.1.B.a.3: Analyze the purpose of the media to determine the appropriate file format and level of compression.
BIT.DCM.1.C: Design, edit, debug, and publish dynamic web pages and websites.	BIT.DCM.1.C.b.1: Identify needs of client and target audience.	BIT.DCM.1.C.i.1: Create a basic web page using recommended HTML5 section elements: header, navigation, main, footer, etc.	BIT.DCM.1.C.a.1: Apply descendent CSS selectors to format content.

Standard: BIT.DCM.1

Students will create publish-quality media for intended audiences or purposes through the use of advanced layout, design, and graphics production software and hardware.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.DCM.1.C.b.2: Create a basic website with links, images, and text using HTML.	BIT.DCM.1.C.i.2: Use the anchor hyperlink reference element to create links to other pages in a site, other websites, email, and phone links.	BIT.DCM.1.C.a.2: Create device-responsive layouts using float, flex, and/or grid layout methods.
	BIT.DCM.1.C.b.3: Code and format basic body elements, including headings, paragraphs, and lists.	BIT.DCM.1.C.i.3: Create and configure graphic elements of a page, including banners, page images, backgrounds, and animated GIFs.	BIT.DCM.1.C.a.3: Incorporate cross-browser functionality in the development of websites.
	BIT.DCM.1.C.b.4: Compile a list of HTML/CSS resources and references.	BIT.DCM.1.C.i.4: Use inline, embedded, and/or external CSS to format page content.	BIT.DCM.1.C.a.4: Implement and configure audio and video elements in a web page.
	BIT.DCM.1.C.b.5: Compare and contrast the features of web development software.	BIT.DCM.1.C.i.5: Create web page layouts using CSS.	BIT.DCM.1.C.a.5: Code advanced page elements such as mobile navigation menus, drop-down menus, and interactive widgets.
	BIT.DCM.1.C.b.6: Identify elements of user interaction: navigation, mouse input, keyboard input, touch input, menus, controls, form elements, and feedback such as tooltips and validation.	BIT.DCM.1.C.i.6: Create, format, and edit table elements to organize data on a web page.	BIT.DCM.1.C.a.6: Describe the purpose of HTML5 Application Programming Interfaces (APIs): geolocation, web storage, manifest, service workers, and canvas.

Standard: BIT.DCM.1

Students will create publish-quality media for intended audiences or purposes through the use of advanced layout, design, and graphics production software and hardware.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		BIT.DCM.1.C.i.7: Publish a website to a server using File Transfer Protocol (FTP).	BIT.DCM.1.C.a.7: Create forms on a web page using HTML/CSS elements and invoke server-side processing to handle form data.
		BIT.DCM.1.C.i.8: Debug coding errors using troubleshooting tools.	BIT.DCM.1.C.a.8: Create dynamic web pages that use server-side programming (for example, PHP and/or ASP.net) and database integration.
		BIT.DCM.1.C.i.9: Incorporate copyright considerations in the development of a website.	BIT.DCM.1.C.a.9: Create and design an e-business site.
		BIT.DCM.1.C.i.10: Research and apply design guidelines and laws that affect website accessibility for all.	BIT.DCM.1.C.a.10: Describe and implement best practices for search engine optimization (SEO).
		BIT.DCM.1.C.i.11: Demonstrate an understanding of key technologies related to web design and development.	BIT.DCM.1.C.a.11: Explain basic network principles and protocols.
			BIT.DCM.1.C.a.12: Research and analyze options for hosting platforms and domain name solutions.

Standard: BIT.DCM.1

Students will create publish-quality media for intended audiences or purposes through the use of advanced layout, design, and graphics production software and hardware.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			BIT.DCM.1.C.a.13: Implement JavaScript functions for additional page functionality.
BIT.DCM.1.D: Capture, edit, and enhance an audio sequence using audio editing software.	BIT.DCM.1.D.b.1: Demonstrate audio recording and editing abilities, integrating layering of multiple assets.	BIT.DCM.1.D.i.1: Enhance audio recordings with audio editing software.	BIT.DCM.1.D.a.1: Export edited audio for use in a variety of digital media.
			BIT.DCM.1.D.a.2: Export media in the appropriate file-size for the chosen destination.
BIT.DCM.1.E: Capture, edit, and enhance a video sequence using a video editing application.	BIT.DCM.1.E.b.1: Identify the purpose, audience, and audience needs for preparing video editing projects.	BIT.DCM.1.E.i.1: Transfer digital video recordings to another digital device through cloud-based and wired means.	BIT.DCM.1.E.a.1: Capture digital video using various cinematic techniques: framing, lighting, angles, etc.
	BIT.DCM.1.E.b.2: Record video footage and edit with a digital device.	BIT.DCM.1.E.i.2: Create an edited video sequence from captured video files and multiple inputs using layering in editing.	BIT.DCM.1.E.a.2: Communicate visually using standard film/video timing techniques: following the action; leading in and out of shots to give editors time to cut; matching shots; zooms and pans; wide vs. tight shots; establishing shots vs. closing shots; shooting B-roll footage.

Standard: BIT.DCM.1

Students will create publish-quality media for intended audiences or purposes through the use of advanced layout, design, and graphics production software and hardware.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.DCM.1.E.b.3: Capture and produce a demonstration using screencasting software.	BIT.DCM.1.E.i.3: Apply the proper frame size for the targeted export frame.	BIT.DCM.1.E.a.3: Adjust camera settings based on lighting, action, distance to subject, portrait, or landscape.
	BIT.DCM.1.E.b.4: Export, publish, and share media to a chosen destination.	BIT.DCM.1.E.i.4: Export media in the appropriate file size for the chosen destination.	BIT.DCM.1.E.a.4: Create post-production assets for video such as thumbnails, end-screens, cards, and links.
		BIT.DCM.1.E.i.5: Import digital images, audio, and video files.	BIT.DCM.1.E.a.5: Apply layer-based editing, keying, and selective cropping techniques to create dynamic video content.
		BIT.DCM.1.E.i.6: Demonstrate knowledge of digital video and audio terminology: frame rate, aspect ratio, safe zone, image and video resolution, file formats, video codecs, and rendering.	BIT.DCM.1.E.a.6: Modify brightness, contrast, color, resolution, and transparency of digital images.
		BIT.DCM.1.E.i.7: Demonstrate knowledge of how color is represented in digital video: white balance, bit depth, and working color space (RGB, CMYK, YUV, HLS).	BIT.DCM.1.E.a.7: Use keyframes to control video properties over time.

Standard: BIT.DCM.1

Students will create publish-quality media for intended audiences or purposes through the use of advanced layout, design, and graphics production software and hardware.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		BIT.DCM.1.E.i.8: Add and animate titles and modify title properties.	
BIT.DCM.1.F: Capture images, video, and audio using a digital device.	BIT.DCM.1.F.b.1: Demonstrate the safe and proper care of digital cameras and devices.	BIT.DCM.1.F.i.1: Rename digital images.	BIT.DCM.1.F.a.1: Explain the function of camera modes and basic camera settings: aperture, shutter speed, and ISO.
	BIT.DCM.1.F.b.2: Demonstrate proper camera-handling techniques.	BIT.DCM.1.F.i.2: Transfer captured digital images to another digital device.	BIT.DCM.1.F.a.2: Adjust camera settings based on lighting, action, distance to subject, portrait, or landscape.
	BIT.DCM.1.F.b.3: Capture digital images using point and shoot.	BIT.DCM.1.F.i.3: Insert captured digital images in print or media projects.	BIT.DCM.1.F.a.3: Compose digital images using various techniques: framing, angles, balance, and lines.
	BIT.DCM.1.F.b.4: Place digital images in a designated folder.	BIT.DCM.1.F.i.4: Organize digital images in subfolders.	BIT.DCM.1.F.a.4: Use compression tools to package folders containing image files.
		BIT.DCM.1.F.i.5: Demonstrate knowledge of common photographic and cinematic composition terms and principles: aspect ratio, rule of thirds, foreground, background, color, tone,	

Standard: BIT.DCM.1

Students will create publish-quality media for intended audiences or purposes through the use of advanced layout, design, and graphics production software and hardware.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		contrast, framing, depth of field, field of view, and white balance.	
BIT.DCM.1.G: Create and edit digital images for use in publications, websites, video, and digital presentations.	BIT.DCM.1.G.b.1: Create a document with the appropriate settings for web, print, and video.	BIT.DCM.1.G.i.1: Compare the advantages and disadvantages of bitmap and vector graphic formats.	BIT.DCM.1.G.a.1: Modify layer visibility using opacity, blending modes, and masks.
	BIT.DCM.1.G.b.2: Import assets into a project.	BIT.DCM.1.G.i.2: Add and manipulate text using appropriate typographic settings.	BIT.DCM.1.G.a.2: Use basic reconstructing and retouching techniques to manipulate digital graphics.
	BIT.DCM.1.G.b.3: Make, manage, and manipulate selections.	BIT.DCM.1.G.i.3: Identify image file formats appropriate for a given purpose.	BIT.DCM.1.G.a.3: Convert digital image file format to meet software requirements.
	BIT.DCM.1.G.b.4: Use layers to manage design elements.	BIT.DCM.1.G.i.4: Identify the purpose, audience, and audience needs for preparing images as it affects the image frame size, output, and end use in the creation of the asset.	BIT.DCM.1.G.a.4: Explain the purpose for multiple image formats.
	BIT.DCM.1.G.b.5: Resize and crop images.	BIT.DCM.1.G.i.5: Modify brightness, contrast, color, resolution, and transparency of digital images.	BIT.DCM.1.G.a.5: Prepare images for professional reproduction and distribution.

Standard: BIT.DCM.1

Students will create publish-quality media for intended audiences or purposes through the use of advanced layout, design, and graphics production software and hardware.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.DCM.1.G.b.6: Identify landscape and portrait images.	BIT.DCM.1.G.i.6: Use image editing software to correct and enhance images.	BIT.DCM.1.G.a.6: Compare and contrast capabilities of photo-editing software.
	BIT.DCM.1.G.b.7: Identify close-up and distant images.	BIT.DCM.1.G.i.7: Demonstrate key terminology related to digital images: image resolution, image size, file types, pixel, raster, bitmap, vector, path, object, type, rasterizing, rendering, resampling, and resizing.	BIT.DCM.1.G.a.7: Differentiate between destructive and nondestructive editing and use them to meet design requirements.
	BIT.DCM.1.G.b.8: Export or save digital assets to various file formats.	BIT.DCM.1.G.i.8: Organize digital images in subfolders for future accessibility.	BIT.DCM.1.G.a.8: Modify the appearance of design elements by using filters and styles.
BIT.DCM.1.H: Demonstrate knowledge of basic design principles and best practices employed in the industry.	BIT.DCM.1.H.b.1: Create a focal point to emphasize contrast. Use a color wheel to identify and employ contrasting colors as well as complementary colors.	BIT.DCM.1.H.i.1: Create and employ custom color schemes and families.	BIT.DCM.1.H.a.1: Communicate visually using the elements and principles of design and common web design techniques: symmetry, proximity, continuity, balance, contrast, hierarchy, color theory, and typography.
	BIT.DCM.1.H.b.2: Employ the principle of repetition to better engage readers through patterns.	BIT.DCM.1.H.i.2: Enhance documents by repeating formatting, such as font style, colors, and alignment.	BIT.DCM.1.H.a.2: Differentiate typography for media in digital and print formats.

Standard: BIT.DCM.1

Students will create publish-quality media for intended audiences or purposes through the use of advanced layout, design, and graphics production software and hardware.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.DCM.1.H.b.3: Employ proximity to group items and create flow and harmony within the graphic.	BIT.DCM.1.H.i.3: Align elements with the graphic as well as with other elements within the document. Repeat alignments, such as left-aligned text and horizontally aligned images.	
	BIT.DCM.1.H.b.4: Enhance documents or media with fonts, font effects, and font color.	BIT.DCM.1.H.i.4: Enhance documents using paragraph and page alignment.	
		BIT.DCM.1.H.i.5: Apply typography concepts using a variety of fonts appropriately to differentiate text.	
BIT.DCM.1.I: Apply digital citizenry guidelines and legal aspects of intellectual property as it relates to digital media.	BIT.DCM.1.I.b.1: Determine the type of intellectual property rights, permissions, and licensing required to use specific content.	BIT.DCM.1.I.i.1: Follow contemporary copyright and fair use guidelines in the design of created and published media, including Creative Commons.	
	BIT.DCM.1.I.b.2: Follow contemporary copyright and fair use guidelines in the design of created and published media.	BIT.DCM.1.I.i.2: Protect personal and private information, permissions, and property by means of legal protections.	

Strand: Economics (EC)

Standard: BIT.EC.1

Students will evaluate how resources are allocated in society.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.EC.1.A: Use the economic decision-making model to determine how to allocate productive resources to meet the wants and needs of society.	BIT.EC.1.A.b.1: Describe the difference between a "want" and a "need."	BIT.EC.1.A.i.1: Use the economic decision-making process to analyze problems.	BIT.EC.1.A.a.1: Develop a solution to a problem using the economic decision-making model, identify the opportunity cost, and list the productive resources needed to solve the problem.
	BIT.EC.1.A.b.2: Identify economic choices students make.	BIT.EC.1.A.i.2: Compare and contrast the costs and benefits of economic choices.	BIT.EC.1.A.a.2: Assess how marginal utility affects both consumers and producers with decision-making.
	BIT.EC.1.A.b.3: Define "productive resources."	BIT.EC.1.A.i.3: Identify productive resources for various products and services.	
	BIT.EC.1.A.b.4: Define "opportunity cost."	BIT.EC.1.A.i.4: Measure marginal utility with the consumption of products.	
BIT.EC.1.B: Differentiate between the methods that are used to allocate resources.	BIT.EC.1.B.b.1: Analyze how scarcity requires the use of a distribution method.	BIT.EC.1.B.i.1: Identify how resources are allocated in traditional, command, market, and mixed economies.	BIT.EC.1.B.a.1: Evaluate the effectiveness in how resources are allocated in traditional, command, market, and mixed economies.

Standard: BIT.EC.1

Students will evaluate how resources are allocated in society.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.EC.1.B.b.2: Recognize that goods and services are distributed using various methods.	BIT.EC.1.B.i.2: Examine the following economic questions that all economies must address: What goods and services will be produced? How will they be produced? Who will consume them?	BIT.EC.1.B.a.2: Compare and contrast the costs and benefits of different allocation methods.
	BIT.EC.1.B.b.3: Discuss how people must either work individually or collectively to determine how resources are allocated.	BIT.EC.1.B.i.3: Explain why no individual method of distributing goods and services can satisfy all wants and needs.	BIT.EC.1.B.a.3: Analyze what a business could do if economic resources are under-utilized and impact the distribution of wealth and income equality or inequality.



Standard: BIT.EC.2

Students will analyze how an economy functions.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.EC.2.A: Analyze the various macroeconomic measures of economic activity.	BIT.EC.2.A.b.1: Describe “inflation” and “deflation.”	BIT.EC.2.A.i.1: Evaluate how inflation and deflation affect purchasing power.	BIT.EC.2.A.a.1: Compare and contrast the advantages and disadvantages of inflation and deflation.
	BIT.EC.2.A.b.2: Illustrate how inflation reduces the value of money.	BIT.EC.2.A.i.2: Measure how the Consumer Price Index (CPI) affects purchasing power.	BIT.EC.2.A.a.2: Analyze the relationship between purchasing power and inflation.

Standard: BIT.EC.2

Students will analyze how an economy functions.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.EC.2.A.b.3: Define the various stages of the business cycle.	BIT.EC.2.A.i.3: Calculate the real interest rate.	BIT.EC.2.A.a.3: Analyze how changes in disposable income can affect an economy.
		BIT.EC.2.A.i.4: Evaluate the various stages of the business cycle.	BIT.EC.2.A.a.4: Determine how the stages of the business cycle impacts both producers and consumers.
BIT.EC.2.B: Describe how the economy can fluctuate based on spending and production decisions at the microeconomic and macroeconomic levels.	BIT.EC.2.B.b.1: Define “standard of living.”	BIT.EC.2.B.i.1: Analyze the effects of gross domestic product (GDP).	BIT.EC.2.B.a.1: Examine the distribution of public goods and services to the related funding sources.
	BIT.EC.2.B.b.2: Identify the relationship of production levels (goods and services) to the standard of living.	BIT.EC.2.B.i.2: Calculate the per capita GDP of a given country.	BIT.EC.2.B.a.2: Compare and contrast potential GDP to real GDP.
		BIT.EC.2.B.i.3: Examine and assess roles and resources of households, businesses, and the government in an economy, and determine how they are interrelated.	BIT.EC.2.B.a.3: Compare the GDPs of various nations to their standards of living.
BIT.EC.2.C: Examine how unemployment imposes costs on individuals and the overall economy.	BIT.EC.2.C.b.1: Compare and contrast employment and unemployment.	BIT.EC.2.C.i.1: Evaluate the effects of unemployment on an economy.	BIT.EC.2.C.a.1: Analyze the various types of unemployment, such as frictional, structural, cyclical, and seasonal.

Standard: BIT.EC.2

Students will analyze how an economy functions.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.EC.2.C.b.2: List reasons why a person may not be currently employed.	BIT.EC.2.C.i.2: Analyze the demographics of a labor force.	BIT.EC.2.C.a.2: Analyze unemployment rates based on age, gender, race, and education levels.
	BIT.EC.2.C.b.3: Explain the purpose of unemployment.	BIT.EC.2.C.i.3: Describe how unemployment affects our purchasing power.	BIT.EC.2.C.a.3: Explain why the national unemployment rate differs from other estimates of actual unemployment.
BIT.EC.2.D: Analyze the factors that stimulate economic growth and adjust the standard of living.	BIT.EC.2.D.b.1: Discuss how physical capital, such as tools and machinery, can help workers improve their productivity.	BIT.EC.2.D.i.1: Measure productivity in terms of input and output.	BIT.EC.2.D.a.1: Appraise economic growth and identify the factors that cause it.
		BIT.EC.2.D.i.2: Evaluate how technological change leads to new and improved goods and services.	BIT.EC.2.D.a.2: Summarize how economic growth impacts poverty and the standard of living.
BIT.EC.2.E: Analyze the role of government, especially the United States, in economic systems.	BIT.EC.2.E.b.1: Describe how governments provide various kinds of public goods and services in a market economy.	BIT.EC.2.E.i.1: Identify the various categories of federal, state, and local government spending.	BIT.EC.2.E.a.1: Compare the benefit distribution of public goods and services to the funding sources.
	BIT.EC.2.E.b.2: Explain how individuals pay for public goods and services.	BIT.EC.2.E.i.2: Compare local, state, and federal tax receipts and expenditures.	BIT.EC.2.E.a.2: Explain how stabilizers, such as unemployment compensation, welfare benefits, Social Security subsidies and tax rates, affect economies in transition.

Standard: BIT.EC.2

Students will analyze how an economy functions.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.EC.2.E.b.3: Define “federal budget deficit” and “budget surplus.”	BIT.EC.2.E.i.3: Distinguish how local, state, and federal government regulations impact business, society, and individuals in a society.	BIT.EC.2.E.a.3: Analyze the effect of national debt or surplus on the economy.
		BIT.EC.2.E.i.4: Identify the various fiscal policies that the federal government uses to regulate the economy.	
		BIT.EC.2.E.i.5: Identify how society allocates resources through laws, public policy, and taxation.	
BIT.EC.2.F: Evaluate how fiscal and monetary policies influence the employment, output, and price levels in our economy.	BIT.EC.2.F.b.1: Examine the history of banking in the United States and identify the Federal Reserve as the central banking authority in the United States.	BIT.EC.2.F.i.1: Describe the purpose and basic structure of the Federal Reserve including the role of monetary policies (e.g., open market securities, reserve requirements, discount rate) in regulating the economy.	BIT.EC.2.F.a.1: Assess how the Federal Reserve System uses monetary policies to impact the economy.
	BIT.EC.2.F.b.2: Identify specific local, state, and federal government regulations and their impact on business, society, and the individual in an economy.	BIT.EC.2.F.i.2: Differentiate between monetary and fiscal policies and identify when it may be appropriate to use a given policy.	BIT.EC.2.F.a.2: Critique the ability of fiscal and monetary policies to influence the level of economic activity in the United States and abroad.

Standard: BIT.EC.3

Students will assess the role that money plays in our society.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.EC.3.A: Analyze the role of institutions and how they help individuals and groups accomplish their goals.	BIT.EC.3.A.b.1: Identify how people contribute to the productive resources of land, labor, capital, and entrepreneurship.	BIT.EC.3.A.i.1: Compare and contrast the various types of economic institutions that exist in an economy, such as banks, labor unions, nonprofits, and businesses.	BIT.EC.3.A.a.1: Assess and analyze the historic events and laws that influenced the creation of our current banking system, including regulatory systems (e.g., Great Depression, Frank Dodd Act, FDIC)
	BIT.EC.3.A.b.2: Differentiate how saving and spending affect the economy differently.	BIT.EC.3.A.i.2: Examine the role of profit and how it is related to risk and uncertainty.	BIT.EC.3.A.a.2: Assess the advantages and disadvantages that result when an organization incorporates and issues stocks.
	BIT.EC.3.A.b.3: Explain the role of banks in a market economy.		BIT.EC.3.A.a.3: Distinguish between and give examples of the different kinds of economic institutions in the US economy (e.g., households, businesses, financial institutions, government agencies, labor unions, and nonprofit organizations).
BIT.EC.3.B: Evaluate how money influences our economy and economic decision-making.	BIT.EC.3.B.b.1: List the functions of money.	BIT.EC.3.B.i.1: Evaluate the functions of money in the United States, including the role of interest rates.	BIT.EC.3.B.a.1: Assess how the money supply is affected by the banking industry.



Standard: BIT.EC.3

Students will assess the role that money plays in our society.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		BIT.EC.3.B.i.2: Describe the role of interest rates.	BIT.EC.3.B.a.2: Evaluate borrowing behaviors in relation to changes in interest rates.
BIT.EC.3.C: Identify and analyze forms of income and the factors that affect income.	BIT.EC.3.C.b.1: Differentiate between earned and unearned income.	BIT.EC.3.C.i.1: Identify the value of workers to employers and the benefits generated by being a productive employee.	BIT.EC.3.C.a.1: Examine how a worker's income is impacted by the demand for goods and services.
			BIT.EC.3.C.a.2: Assess how the general economy, economic indicators discrimination, and government and entrepreneurial/corporate policies can affect personal income.

Standard: BIT.EC.4

Students will analyze how market structures and prices affect the economy.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.EC.4.A: Differentiate between buyers and sellers.		BIT.EC.4.A.i.1: Illustrate how market prices are set.	BIT.EC.4.A.a.1: Interpret supply and demand curves.
	BIT.EC.4.A.b.2: Describe and	BIT.EC.4.A.i.2: Demonstrate	BIT.EC.4.A.a.2: Illustrate



Standard: BIT.EC.4

Students will analyze how market structures and prices affect the economy.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	give examples of markets for goods and services in the US economy.	the process in which the equilibrium price of a good or service equals demand.	shortages and surpluses on supply and demand curves and discuss the effects of each.
	BIT.EC.4.A.b.3: Define the price of a good or service.	BIT.EC.4.A.i.3: Examine how markets are interrelated and changes in the price of one good or service can lead to changes in the price of other goods and services.	BIT.EC.4.A.a.3: Identify substitutes for commonly used products and when consumers would choose a substitute.
	BIT.EC.4.A.b.4: Illustrate the law of demand: when prices are high, people buy less of a product.	BIT.EC.4.A.i.4: Identify factors contributing to the demand for a product.	
BIT.EC.4.B: Evaluate how competition between buyers and sellers influences both the quantity produced and the price of a good or service.	BIT.EC.4.B.b.1: Define competition in a market economy.	BIT.EC.4.B.i.1: Differentiate how competition is influenced.	BIT.EC.4.B.a.1: Evaluate how competition levels are determined.
	BIT.EC.4.B.b.2: Discuss the effect of competition on products and prices.	BIT.EC.4.B.i.2: Examine how competition for similar products impacts buyers and sellers.	BIT.EC.4.B.a.2: Explain why collusion impacts the market's equilibrium and influences the level of competition.
			BIT.EC.4.B.a.3: Assess the effect of the introduction of new products and production methods on competition.
BIT.EC.4.C: Interpret how specialization allows goods and services to be produced, which impacts	BIT.EC.4.C.b.1: Identify how economic specialization occurs when people	BIT.EC.4.C.i.1: Describe how the specialization of labor influences the	BIT.EC.4.C.a.1: Compare factors that prompt international trade such as

Standard: BIT.EC.4

Students will analyze how market structures and prices affect the economy.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
both production and consumption.	concentrate their productive efforts on fewer goods and services than they actually use.	interdependence between producers and consumers.	the availability of productive resources and differences in relative prices.
	BIT.EC.4.C.b.2: Recognize when people specialize and divide labor tasks, how this impacts productivity, costs, and money.	BIT.EC.4.C.i.2: Measure labor productivity as output per worker.	BIT.EC.4.C.a.2: Assess how specialization facilitates international trade and interdependence between nations.
		BIT.EC.4.C.i.3: Evaluate how economic conditions and policies in one country can affect another country because of international economic interdependence.	BIT.EC.4.C.a.3: Measure the effect that transaction costs have on international trade.

Strand: Entrepreneurship (EN)**Standard: BIT.EN.1**

Students will recognize and evaluate the characteristics of entrepreneurs and the role they play in the economy.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.EN.1.A: Describe the roles entrepreneurs play in today's economy.	BIT.EN.1.A.b.1: Define "entrepreneur" and "entrepreneurship"	BIT.EN.1.A.i.1: List the characteristics of an entrepreneur.	BIT.EN.1.A.a.1: Analyze the role of entrepreneurs in the past and present economy.



Standard: BIT.EN.1

Students will recognize and evaluate the characteristics of entrepreneurs and the role they play in the economy.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.EN.1.A.b.2: Compare and contrast employer, employee, business owner, self-employed worker, entrepreneur, and free-lance and gig workers.	BIT.EN.1.A.i.2: Compare the costs and benefits of becoming an entrepreneur and an employee.	
	BIT.EN.1.A.b.3: Define “goods,” “service,” “opportunity costs,” and “factors of production.”	BIT.EN.1.A.i.3: Investigate national and global trends that serve as opportunities in the area of entrepreneurship.	BIT.EN.1.A.a.3: Formulate the steps in establishing a business oriented toward a recognized opportunity.
	BIT.EN.1.A.b.4: Define business functions and activities: sales, service, production, management, accounting, etc.	BIT.EN.1.A.i.4: Describe a market economy and how supply and demand interact to determine price.	BIT.EN.1.A.a.4: Analyze the competition level in a market, the impact on supply, and the effect on price and availability.
BIT.EN.1.B: Describe the characteristics of an entrepreneurial mindset.	BIT.EN.1.B.b.1: Identify the characteristics and skills of a successful entrepreneur	BIT.EN.1.B.i.1: Analyze the characteristics and skills of successful entrepreneurs	BIT.EN.1.B.a.1: Develop a portfolio of personal accomplishments demonstrating entrepreneurial characteristics and skills.
	BIT.EN.1.B.b.2: Identify the successes and shortcomings of entrepreneurs in history.	BIT.EN.1.B.i.2: Analyze personal traits that are indicative of typical leaders and entrepreneurship minded professionals.	BIT.EN.1.A.a.2: Evaluate the risks and benefits of choosing to become an entrepreneur.

Standard: BIT.EN.2

Students will analyze the components of successful entrepreneurial ventures.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.EN.2.A: Analyze the components of successful entrepreneurial ventures.	BIT.EN.2.A.b.1: Discuss the importance of entrepreneurship as a choice in a market economy.	BIT.EN.2.A.i.1: Determine the feasibility of entrepreneurial ideas.	BIT.EN.2.A.a.1: Assess the impact of entrepreneurship on your local community and economy.
	BIT.EN.2.A.b.2: List the different forms of business ownership.	BIT.EN.2.A.i.2: Compare and contrast the different forms of business ownership.	BIT.EN.2.A.a.2: Simulate the process for forming a business entity.
	BIT.EN.2.A.b.3: Explain the importance of a business plan.	BIT.EN.2.A.i.3: Develop a business plan for a prospective entrepreneurial venture.	BIT.EN.2.A.a.2: Evaluate market viability for a new business venture: population demographics, problem recognition, levels of employment, competitors, SWOT analysis, etc.
	BIT.EN.2.A.b.4: Generate alternative solutions to a given problem.	BIT.EN.2.A.i.4: Identify and compare tools used by entrepreneurs for planning.	BIT.EN.2.A.a.3: Demonstrate proficiency in tools and technologies related to accounting, finance, marketing, law, human resources, management, and operations.
BIT.EN.2.B: Use cost analysis when planning products and services.	BIT.EN.2.B.b.1: List what determines the cost of producing a good or service.	BIT.EN.2.B.i.1: Describe the interrelationship between cost and price.	BIT.EN.2.B.a.1: Research the factors that affect global pricing: currency rates, tariffs, price controls, etc.



Standard: BIT.EN.2

Students will analyze the components of successful entrepreneurial ventures.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.EN.2.B.b.2: Describe the difference between fixed and variable costs.	BIT.EN.2.B.i.2: Calculate unit costs for a product and conduct a break-even analysis.	BIT.EN.2.B.a.2: Analyze how a fluctuating economy impacts price competition and pricing policies.

Standard: BIT.EN.3

Students will recognize trends in society that can lead to entrepreneurial opportunities.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.EN.3.A: Explain the interaction of business and resources in an entrepreneurial venture.	BIT.EN.3.A.b.1: Define “social and environmental entrepreneurship.”	BIT.EN.3.A.i.1: Identify potential solutions for social and environmental concerns.	BIT.EN.3.A.a.1: Identify a social/environmental problem and use entrepreneurial principles to create a business venture to achieve change.
	BIT.EN.3.A.b.2: Identify the various stakeholders impacted by business.	BIT.EN.3.A.i.2: Discuss the ethical dilemma between what is profitable and socially responsible.	BIT.EN.3.A.a.2: Research sustainable business product choices and trends in society.
	BIT.EN.3.A.b.3: Research commonly used products to determine how they benefit the earth or conserve resources.	BIT.EN.3.A.i.3: Investigate business opportunities related to social environmental concerns.	

Standard: BIT.EN.4

Students will use lean startup methods to generate, develop, and test ideas.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.EN.4.A: Create a business model around a problem, need, or want.	BIT.EN.4.A.b.1: List ideas for a new product or service.	BIT.EN.4.A.i.1: Define “design thinking principles.”	BIT.EN.4.A.a.1: Perform customer research to identify problems and risks.
	BIT.EN.4.A.b.2: Develop a solution to a problem.	BIT.EN.4.A.i.2: Define “lean startup.”	BIT.EN.4.A.a.2: Conduct primary and secondary research to develop solutions to customer needs and wants.
		BIT.EN.4.A.i.3: Describe opportunities/problems that led to the development of successful entrepreneurial ventures.	BIT.EN.4.A.a.3: Analyze potential business opportunities in relation to preferences, finances, and risk.

Standard: BIT.EN.5

Students will understand financial concepts and record management of a business.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.EN.5.A: Use financial tools to make sound business decisions.	BIT.EN.5.A.b.1: Define “startup capital,” and list sources of funding for an entrepreneur.	BIT.EN.5.A.i.1: Describe the resources needed to start a business: materials, labor, raw goods, etc.	BIT.EN.5.A.a.1: Project the total cash needed to start a business and ongoing operational costs.
	BIT.EN.5.A.b.2: Identify the resources needed and costs to produce and sell a product or service.	BIT.EN.5.A.i.2: Analyze the costs of starting a business venture.	BIT.EN.5.A.a.2: Research options to obtain funding or financing to start a business venture.

Standard: BIT.EN.5**Students will understand financial concepts and record management of a business.**

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.EN.5.B: Recognize the need to establish, maintain, and analyze records for business decisions.	BIT.EN.5.B.b.1: Identify reasons for keeping accurate business and financial records.	BIT.EN.5.B.i.1: Describe the impact of incomplete or inaccurate financial statements on a business.	BIT.EN.5.B.a.1: Prepare basic financial statements: income statement, balance sheet, cash flow statement.

Standard: BIT.EN.6**Students will develop a management plan for a business venture.**

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.EN.6.A: Utilize goal setting to create a plan for a business, and define the management structure and climate of a business.	BIT.EN.6.A.b.1: Develop short- and long-term goals for a business.	BIT.EN.6.A.i.1: Create a mission and vision statement.	BIT.EN.6.A.a.1: Create a strategic growth plan.
	BIT.EN.6.A.b.2: List characteristics of a good employee and employer.	BIT.EN.6.A.i.2: Identify skills and traits needed for specific jobs and careers.	BIT.EN.6.A.a.2: Develop a plan to meet human resource needs.
	BIT.EN.6.A.b.3: List the skills and traits of a leader in a business setting.	BIT.EN.6.A.i.3: Describe the importance of a diverse workforce.	BIT.EN.6.A.a.3: Create an organizational structure for an entrepreneurial venture.
		BIT.EN.6.A.i.4: Describe the attributes of successful teams and provide examples.	BIT.EN.6.A.a.4: Develop strategies to motivate employees and apply effective leadership and motivation techniques.

Standard: BIT.EN.6**Students will develop a management plan for a business venture.**

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.EN.6.A.b.5: Describe the attributes of successful teams and provide examples.	BIT.EN.6.A.i.5: Demonstrate how successful teams solve problems.	BIT.EN.6.A.a.5: Explain the impact of leadership styles and management approaches on employee productivity and morale.

Strand: Foundations of Computer Science (CS)

Standard: BIT.CS.1			
Students will explain how computing innovations are improved through collaboration.			
Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.CS.1.A: Work collaboratively using an iterative development process.	BIT.CS.1.A.b.1: Define and give an example of a computing innovation.	BIT.CS.1.A.i.1: Explain how computing innovations are developed and improved by groups of people working collaboratively.	
	BIT.CS.1.A.b.2: Demonstrate effective interpersonal skills during collaboration, including communication, consensus-building, conflict resolution, and negotiation.	BIT.CS.1.A.i.2: Explain how collaboration affects the development of a solution.	
BIT.CS.1.B: Create and innovate using an interactive design process that is user-focused, incorporates implementation and feedback cycles, and leaves opportunity for experimentation and risk-taking.	BIT.CS.1.B.b.1: Define a process used to develop a solution to a problem using a computer program, such as Polya 4-step.	BIT.CS.1.B.i.1: Use the steps in a development process to solve a simple problem.	BIT.CS.1.B.a.1: Design a program and its Graphic User Interface using an IDE, framework, and/or library.
	BIT.CS.1.B.b.2: Give an example of a simple business problem whose solution could be programmed on a computer.	BIT.CS.1.B.i.2: Identify inputs and corresponding expected outputs or behaviors that can be used to check the correctness of an algorithm or program.	BIT.CS.1.B.a.2: Explain how a program or code segment functions.
	BIT.CS.1.B.b.3: Define “algorithm” and create an algorithm to solve a simple problem using a computer.	BIT.CS.1.B.i.3: Develop code to implement the algorithm that solves a simple problem.	BIT.CS.1.B.a.3: Identify and document code segments used from other sources.

Standard: BIT.CS.1**Students will explain how computing innovations are improved through collaboration.**

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.CS.1.B.b.4: Identify and correct logic errors in the algorithm.	BIT.CS.1.B.i.4: Identify and correct errors in algorithms and programming statements including logic, syntax, run-time, and overflow errors.	BIT.CS.1.B.a.4: Apply the principles of software development projects, work collaboratively in a team, and deliver high-quality products that meet the needs of the user.
	BIT.CS.1.B.b.5: Demonstrate how to hand trace coding errors using a set of test cases.	BIT.CS.1.B.i.5: Describe the purpose of a code segment or program by writing documentation.	BIT.CS.1.B.a.5: Develop computer software for desktop, web, and mobile platforms.
		BIT.CS.1.B.i.6: Utilize a variety of methods for debugging code, including the use of test cases, visualizations, debuggers, and adding extra output statements.	

Standard: BIT.CS.2

Students will develop an understanding of how computers handle data and will use data to solve problems.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.CS.2.A: Demonstrate how a computer represents data internally and how programs are used to translate data into a representation more easily understood by people.	BIT.CS.2.A.b.1: Count in binary and hexadecimal from 0 through decimal 255.	BIT.CS.2.A.i.1: Calculate and convert between binary, decimal, and hexadecimal values.	BIT.CS.2.A.a.1: Demonstrate how data values can be stored in variables, lists of items, or stand-alone constants.
	BIT.CS.2.A.b.2: List different types of data that can be stored in a computer.	BIT.CS.2.A.i.2: Using a spreadsheet program, use functions and develop sequences to clean data.	BIT.CS.2.A.a.2: Demonstrate how data values can be passed as input/output to and from procedures such as spreadsheet functions.
	BIT.CS.2.A.b.3: Define and give an example of "cleaning" data, "filtering" data, and "sorting" data.	BIT.CS.2.A.i.3: Using a spreadsheet program, use functions and develop sequences to filter data.	
	BIT.CS.2.A.b.4: List and explain applications of different number formats.	BIT.CS.2.A.i.4: Using a spreadsheet program, use data sorting capabilities to sort a table by a single column; then by two columns.	BIT.CS.2.A.a.3: Use computational tools to collect, transform, organize, chart, and present data.
		BIT.CS.2.A.i.5: Explain how data can be represented using bits and the consequences of using bits to represent data.	
BIT.CS.2.B: Demonstrate how programs can be used to process data, which allows users to discover information and create new	BIT.CS.2.B.b.1: Identify various data types: integers, floats/decimals, strings, and Booleans.	BIT.CS.2.B.i.1: Explain how programs can be used to gain insight and knowledge from data.	BIT.CS.2.B.a.1: Extract information from data using a program.



Standard: BIT.CS.2

Students will develop an understanding of how computers handle data and will use data to solve problems.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
knowledge.		BIT.CS.2.B.i.2: Explain the difference between lossy and lossless data compression algorithms.	BIT.CS.2.B.a.2: Compare data compression algorithms to determine which is best in a particular context.
		BIT.CS.2.B.i.3: Identify the challenges associated with processing data.	BIT.CS.2.B.a.3: Describe what information can be extracted from data and metadata.
BIT.CS.2.C: Demonstrate knowledge of data science (DS) and data engineering by understanding and defining the problem, collecting, and cleaning data, and analyzing and presenting data.	BIT.CS.2.C.b.1: Define data science (data analytics) and data engineering (defining and interpreting vs. collecting and cleaning).	BIT.CS.2.C.i.1: Formulate questions to clarify the problem at hand and formulate additional questions that can be answered with data analysis.	BIT.CS.2.C.a.1: Analyze and present data by selecting appropriate graphical and numerical methods.
	BIT.CS.2.C.b.2: Demonstrate the impact of data science on school, work, and leisure time.	BIT.CS.2.C.i.2: Design and implement a plan to collect appropriate data to answer a research question.	BIT.CS.2.C.a.2: Identify the general concepts of databases/data tools and how to utilize design thinking to produce solutions that are clean and thoughtful.
	BIT.CS.2.C.b.3: Collect quantitative data over time from multiple sources.	BIT.CS.2.C.i.3: Use various data collection techniques for different types of computational problems.	

Standard: BIT.CS.3

Students will understand programming structures and commands to form algorithms and abstractions in a given programming language.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.CS.3.A: Demonstrate how programmers represent and organize data in multiple ways to find specific solutions to generalizable problems.	BIT.CS.3.A.b.1: Represent a value with a variable.	BIT.CS.3.A.i.1: Determine the value of a variable as a result of an assignment.	BIT.CS.3.A.a.1: Identify abstraction using lists or other collection types.
	BIT.CS.3.A.b.2: Represent a list or string using a variable.	BIT.CS.3.A.i.2: Represent a string using a variable and display a segment of the string by applying an algorithmic method.	BIT.CS.3.A.a.2: Explain how the use of data abstraction manages complexity in program code.
	BIT.CS.3.A.b.3: Use indexing to reference an element in a list or string using natural numbers.	BIT.CS.3.A.i.3: Represent a list of numbers and display a particular number from the list by applying an algorithmic selection process.	
	BIT.CS.3.A.b.4: Use mathematical operations to change a value stored in a variable.		
BIT.CS.3.B: Explain how programs incorporate iteration and selection constructs to represent repetition and make decisions to handle varied input values.	BIT.CS.3.B.b.1: Express an algorithm that uses sequencing without using a programming language.	BIT.CS.3.B.i.1: Represent a step-by-step algorithmic process using sequential coding statements.	BIT.CS.3.B.a.1: Write conditional statements and determine the result of conditional statements.
	BIT.CS.3.B.b.2: Evaluate expressions that use arithmetic operators.	BIT.CS.3.B.i.2: Evaluate expressions using the order of operations including exponents and negative signs.	BIT.CS.3.B.a.2: Write nested conditionals and determine the result of nested conditional statements.



Standard: BIT.CS.3

Students will understand programming structures and commands to form algorithms and abstractions in a given programming language.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.CS.3.B.b.3: Express an algorithm that uses selection without using a programming language.	BIT.CS.3.B.i.3: Evaluate expressions that manipulate strings.	BIT.CS.3.B.a.3: Write iteration statements and determine the result of iteration statements.
	BIT.CS.3.B.b.4: Express an algorithm that uses iteration without using a programming language.	BIT.CS.3.B.i.4: For relationships between two variables, expressions, or values, write and evaluate expressions using relational operators.	BIT.CS.3.B.a.4: Write iteration statements to traverse a list and determine the result: iterate through a list of integers and determine the sum, average, maximum, and minimum of those integers.
		BIT.CS.3.B.i.5: For relationships between Boolean values, write and evaluate expressions that use logical operators.	BIT.CS.3.B.a.5: Write and evaluate expressions that use list indexing and list procedures.
		BIT.CS.3.B.i.6: Compare multiple algorithms to determine if they yield the same side effect or result.	BIT.CS.3.B.a.6: For a binary search algorithm, determine the number of iterations required to find a value in a data set.
		BIT.CS.3.B.i.7: Combine and modify existing algorithms.	BIT.CS.3.B.a.7: Develop and apply a series of test cases to verify that a program performs according to its design specifications.

Standard: BIT.CS.3

Students will understand programming structures and commands to form algorithms and abstractions in a given programming language.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		BIT.CS.3.B.i.8: Explain the requirements necessary to complete a binary search.	
BIT.CS.3.C: Explain how programmers break down problems into smaller, more manageable pieces by creating procedures and leveraging parameters that generalize processes and can be reused for program efficiency.		BIT.CS.3.C.i.1: Explain how the use of procedural abstraction manages complexity in a program.	BIT.CS.3.C.a.1: Write statements to call procedures and determine the result or effect of a procedure call.
		BIT.CS.3.C.i.2: Decompose a larger computational problem into parts and create solutions for one or more parts.	BIT.CS.3.C.a.2: Write functions to implement the decomposition of a larger computational problem.
		BIT.CS.3.C.i.3: Use an iterative process to solve computational problems.	BIT.CS.3.C.a.3: Select appropriate libraries or existing code segments to use in creating a solution to a larger problem.
		BIT.CS.3.C.i.4: Demonstrate code reuse by creating algorithmic solutions using libraries and Application Program Interfaces.	BIT.CS.3.C.a.4: Write and evaluate expressions to generate random values.
			BIT.CS.3.C.a.5: Use version control systems, Integrated Development Environments, and collaboration tools in a group software project.

Standard: BIT.CS.3

Students will understand programming structures and commands to form algorithms and abstractions in a given programming language.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.CS.3.D: Explain the concept of algorithmic efficiency.		BIT.CS.3.D.i.1: Explain the difference between algorithms that run in reasonable time and those that do not.	BIT.CS.3.D.a.1: Explain the value of heuristic algorithms to approximate solutions for difficult-to-solve computational problems.
		BIT.CS.3.D.i.2: Evaluate algorithms in terms of their efficiency, correctness, and clarity.	BIT.CS.3.D.a.2: Explain the existence of undecidable problems in computer science.

Standard: BIT.CS.4

Students will demonstrate how computer systems and networks work and how dividing tasks across multiple computing devices can improve the speed and efficiency at which processes occur.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.CS.4.A: Explain how computer systems and networks facilitate the transfer of data.	BIT.CS.4.A.b.1: Describe the differences between the Internet and the World Wide Web.	BIT.CS.4.A.i.1: Explain how computing devices work together in a network.	BIT.CS.4.A.a.1: Describe the benefits of fault tolerance and identify vulnerabilities to failure in a system.
		BIT.CS.4.A.i.2: Explain how the Internet works.	BIT.CS.4.A.a.2: Write a program that performs basic encryption: shift cipher, substitution cypher.

Standard: BIT.CS.4

Students will demonstrate how computer systems and networks work and how dividing tasks across multiple computing devices can improve the speed and efficiency at which processes occur.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		BIT.CS.4.A.i.3: Explain how data are sent through the Internet via packets.	BIT.CS.4.A.a.3: Explain and demonstrate public key encryption.
BIT.CS.4.B: Explain how parallel and distributed computing leverage multiple computers to solve complex problems or process large data sets more quickly.		BIT.CS.4.B.i.1: Compare problem solutions for sequential, parallel, and distributed computing, and determine the efficiency of those solutions.	BIT.CS.4.B.a.1: Describe benefits and challenges of parallel and distributed computing.
		BIT.CS.4.B.i.2: Describe how parallel processing can be used to solve large computational problems.	

Standard: BIT.CS.5

Students will develop an understanding of how the creation of computer programs can have an extensive impact, sometimes unintended, on society, economies, and cultures.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.CS.5.A: Explain how computing innovations can have intended and unintended consequences.	BIT.CS.5.A.b.1: Explain how an effect of a computing innovation can be both beneficial and harmful.	BIT.CS.5.A.i.1: Describe issues that contribute to the digital divide.	BIT.CS.5.A.a.1: Describe a solution to at least two of the issues related to the digital divide.



Standard: BIT.CS.5

Students will develop an understanding of how the creation of computer programs can have an extensive impact, sometimes unintended, on society, economies, and cultures.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.CS.5.A.b.2: Explain how a computing innovation can have an impact beyond its intended purpose.	BIT.CS.5.A.i.2: Explain how computers can be used to represent real-world phenomena or outcomes and compare simulations with real-world contexts.	BIT.CS.5.A.a.2: Research a real-world phenomenon and describe how a computer program models it.
		BIT.CS.5.A.i.3: Explain how bias exists in computing innovations.	BIT.CS.5.A.a.3: Explore the notion of bias in data used in machine learning.
		BIT.CS.5.A.i.4: Explain how people participate in problem-solving processes at scale.	BIT.CS.5.A.a.4: Debate the social and economic implications associated with ethical and unethical computing practices.
		BIT.CS.5.A.i.5: Explain how the use of computing can raise legal and ethical concerns.	BIT.CS.5.A.a.5: Compare the positive and negative impacts of computing on behavior and culture.
			BIT.CS.5.A.a.6: Explain laws and regulations that impact an individual's digital privacy.
BIT.CS.5.B: Explain how the use of computing innovations may involve risks to personal safety and identity.		BIT.CS.5.B.i.1: Describe the risks to privacy from collecting and storing personal data on a computer system.	BIT.CS.5.B.a.1: Research ways that personal data can be stolen by cybersecurity attacks.
	BIT.CS.5.B.b.1: Explain how computing resources can be protected and misused.	BIT.CS.5.B.i.2: Explain how unauthorized access to computing resources is gained.	BIT.CS.5.B.a.2: Research ways that data bases of companies can be stolen by

Standard: BIT.CS.5

Students will develop an understanding of how the creation of computer programs can have an extensive impact, sometimes unintended, on society, economies, and cultures.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.CS.5.C: Apply digital citizenry guidelines and legal aspects of intellectual property.	BIT.CS.5.C.b.1: Determine the type of intellectual property rights, permissions, and licensing required to use specific content.	BIT.CS.5.C.i.1: Follow contemporary copyright and fair use guidelines (using Creative Commons) in the design and creation of computational artifacts.	cybersecurity attacks.
	BIT.CS.5.C.b.2: Protect personal and private information, permissions, and property by means of legal protections.	BIT.CS.5.C.i.2: Compare and contrast various software licensing options: open source, commercial.	

Standard: BIT.CS.6

Students will develop an understanding that building an inclusive and diverse computing culture is important to business and society.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.CS.6.A: Explain how being intentional about diversity and inclusion can produce better computer applications and address the varied needs of customers.	BIT.CS.6.A.b.1: Explore, research, and present findings on careers in computer science.	BIT.CS.6.A.i.1: Research companies that have adopted inclusive and diverse teams to develop software and report their results.	BIT.CS.6.A.a.1: Demonstrate including unique perspectives of others and reflect on one's own perspectives when designing computational products to mitigate bias.



Standard: BIT.CS.6

Students will develop an understanding that building an inclusive and diverse computing culture is important to business and society.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		BIT.CS.6.A.i.2: Explain and provide examples of how computer applications can be designed to include individuals with disabilities.	BIT.CS.6.A.a.2: Address the needs of diverse end users during the design process to produce artifacts with broad accessibility and usability.
		BIT.CS.6.A.i.3: Explain how collaborative groups can affect the development of an application in a business.	BIT.CS.6.A.a.3: Employ self- and peer-advocacy to address bias in interactions, product design, and development methods.



Standard: BIT.CS.7

Students will learn foundations of artificial intelligence (AI), including machine learning (ML), and how business, industry, and society are affected.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.CS.7.A: Demonstrate knowledge of the field of artificial intelligence and demonstration of its use.	BIT.CS.7.A.b.1: Identify and describe the history and evolution of artificial intelligence.	BIT.CS.7.A.i.1: Demonstrate the AI Big Idea of perception: sensors, internet of things.	BIT.CS.7.A.a.1: Using a pre-programmed application, collect and prepare data to successfully use that application.
	BIT.CS.7.A.b.2: Identify and describe the most current applications of artificial intelligence personally and in business and industry.	BIT.CS.7.A.i.2: Demonstrate the AI Big Idea of representation and reasoning: agents maintain representations of the world	BIT.CS.7.A.a.2: Use a creative problem-solving process to collaboratively solve problems relevant to artificial intelligence.



Standard: BIT.CS.7

Students will learn foundations of artificial intelligence (AI), including machine learning (ML), and how business, industry, and society are affected.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		and use them for reasoning.	
	BIT.CS.7.A.b.3: Identify and describe the five AI Big Ideas: perception, representation and reasoning, learning, natural interaction, and societal impact.	BIT.CS.7.A.i.3: Demonstrate the AI Big Idea of learning. Describe at least two different types of data that are used to establish intelligent systems.	
	BIT.CS.7.A.b.4: Describe different types of data and how they are used in artificial intelligence.	BIT.CS.7.A.i.4: Demonstrate the AI Big Idea of natural interaction: how people interact with "intelligent" computers.	
	BIT.CS.7.A.b.5: Explore, research, and present findings on AI careers.	BIT.CS.7.A.i.5: Describe and research the social and ethical impacts of artificial intelligence.	

Strand: Global Business (GB)

Standard: BIT.GB.1

Students will analyze the impact of the global business environment on business, consumers, and economies.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.GB.1.A: Analyze the role of international business and trade.	BIT.GB.1.A.b.1: Identify international goods and services.	BIT.GB.1.A.i.1: Identify goods and services imported to and exported from a state, region, and country.	BIT.GB.1.A.a.1: Describe the product development process used to create goods and services in different countries.
	BIT.GB.1.A.b.2: Define domestic business and global business.	BIT.GB.1.A.i.2: Examine the difference between domestic and global business.	BIT.GB.1.A.a.2: Evaluate the economic impact of global businesses on domestic businesses.
	BIT.GB.1.A.b.3: List examples of international trade in the community and state.	BIT.GB.1.A.i.3: Explain the historical origins of global business.	BIT.GB.1.A.a.3: Describe the major factors that influence global trade.
		BIT.GB.1.A.i.4: Describe settings in which global business affects people.	BIT.GB.1.A.a.4: Examine international trade partnerships and describe the trading patterns regionally, statewide, and between countries.
BIT.GB.1.B: Determine how geography and historical trends play a role in globalization.	BIT.GB.1.B.b.1: Identify major geographical features of various countries.	BIT.GB.1.B.i.1: Identify and locate major trade regions of the world.	BIT.GB.1.B.a.1: Describe the impact of geography on international business, including factors such as climate, time zones, distance, resources, technology, etc.
	BIT.GB.1.B.b.2: Differentiate	BIT.GB.1.B.i.2: Explain how	BIT.GB.1.B.a.2: Explain the

Standard: BIT.GB.1

Students will analyze the impact of the global business environment on business, consumers, and economies.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	between various time zones worldwide.	time zones around the world influence global business.	roles that less developed countries play in global business.
		BIT.GB.1.B.i.3: Discuss the role the United States, Wisconsin, and regional communities have played in global business.	BIT.GB.1.B.a.3: Examine how absolute and comparative advantages help countries trade.
		BIT.GB.1.B.i.4: Discuss the global standards of living and their impact on a country.	BIT.GB.1.B.a.4: Identify which countries are currently recognized as global leaders and those that are predicted to increase their global presence.
BIT.GB.1.C: Explain the impact of political and legal organizations on international trade.		BIT.GB.1.C.i.1: Explain the different types of governments in the world.	BIT.GB.1.C.a.1: Analyze the political environments that impact global business.
		BIT.GB.1.C.i.2: Analyze different legal systems in various countries.	BIT.GB.1.C.a.2: Devise a plan to deal with legal implications when conducting business across national boundaries.
		BIT.GB.1.C.i.3: Discuss the ways in which governments influence global trade.	BIT.GB.1.C.a.3: Formulate a plan to settle differences in global trade relations.
BIT.GB.1.D: Assess the processes of importing and exporting, and how trade barriers and agreements work.	BIT.GB.1.D.b.1: Define “import,” “export,” and “trade.”	BIT.GB.1.D.i.1: Identify reasons why countries trade with each other.	BIT.GB.1.D.a.1: Explain the documents used in the processes of importing and

Standard: BIT.GB.1

Students will analyze the impact of the global business environment on business, consumers, and economies.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			exporting.
		BIT.GB.1.D.i.2: Examine the steps in the processes of importing and exporting.	BIT.GB.1.D.a.2: Develop a plan to minimize risks and increase security needed to move products and services to global markets.
		BIT.GB.1.D.i.3: Identify why companies and countries trade.	BIT.GB.1.D.a.3: Evaluate the impact of current and emerging trade issues, direct and indirect, on global trade.
		BIT.GB.1.D.i.4: Analyze the importance of having a balance of trade for countries.	BIT.GB.1.D.a.4: Predict possible solutions to a negative balance of trade.
	BIT.GB.1.D.b.2: Explain why governments impose trade barriers.	BIT.GB.1.D.i.5: Describe the regulations that influence the import and export of goods and services.	BIT.GB.1.D.a.5: Describe the role and impact of international trade agreements and organizations.
BIT.GB.1.E: Explain the concepts, role, and importance of international finance and risk management.	BIT.GB.1.E.b.1: Identify currencies of various countries.	BIT.GB.1.E.i.1: Explain the use of currency and bartering in the global marketplace.	BIT.GB.1.E.a.1: Evaluate the International Monetary System.
		BIT.GB.1.E.i.2: Describe methods that nations use to control currency exchange issues.	BIT.GB.1.E.a.2: Analyze how changing currency rates and interest rates affect international trade.
	BIT.GB.1.E.b.2: Identify challenges associated with dealing in foreign currencies.	BIT.GB.1.E.i.3: Assess how multinational banks impact global business.	BIT.GB.1.E.a.3: Assess banking regulations involving theft of currency

Standard: BIT.GB.1

Students will analyze the impact of the global business environment on business, consumers, and economies.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			transactions.
		BIT.GB.1.E.i.4: Analyze risk versus return in global transactions.	BIT.GB.1.E.a.4: Construct a plan to minimize risk in international finance transactions.
		BIT.GB.1.E.i.5: Examine the types of commercial risk in international trade.	BIT.GB.1.E.a.5: Develop insurance options that will protect international transactions.

Standard: BIT.GB.2

Students will analyze the management strategies in a global business environment.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.GB.2.A: Analyze challenges in operating and management strategies used in international businesses.		BIT.GB.2.A.i.1: Discuss the pros and cons of using a global workforce.	BIT.GB.2.A.a.1: Design organizational strategies for multinational businesses.
		BIT.GB.2.A.i.2: Illustrate the structure of a global business in an organizational chart.	BIT.GB.2.A.a.2: Construct a system to evaluate customer satisfaction and product quality.



Standard: BIT.GB.2

Students will analyze the management strategies in a global business environment.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			BIT.GB.2.A.a.3: Evaluate how control procedures benefit global businesses.
BIT.GB.2.B: Examine how cultural differences affect human resource management in global business.	BIT.GB.2.B.b.1: Analyze the elements of culture and subcultures.	BIT.GB.2.B.i.1: Describe the different living and working conditions around the world.	BIT.GB.2.B.a.1: Evaluate social and cultural factors that influence human resource activities.
	BIT.GB.2.B.b.2: Assess the occupational hazards that differ between countries.	BIT.GB.2.B.i.2: Compare the different employee compensation packages in different cultures.	BIT.GB.2.B.a.2: Design a system to evaluate employee satisfaction and training in global businesses.
			BIT.GB.2.B.a.5: Create a plan to use social institutions to help workers adapt to new cultures.

Strand: Hardware and IT Infrastructure (HIT)

Standard: BIT.HIT.1

Students will select, build, upgrade, configure, and maintain a personal computer and common peripheral devices.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.HIT.1.A: Select appropriate computer components to build, repair, and upgrade personal computers.	BIT.HIT.1.A.b.1: Explain how personal computer components work together.	BIT.HIT.1.A.i.1: Explain the features and functions of the components in a computer system.	BIT.HIT.1.A.a.1: Identify and explain the purpose and characteristics of common system components: storage devices, power supply, memory, and CPU.
	BIT.HIT.1.A.b.2: Identify the type, purpose, and performance characteristics of common peripheral ports.	BIT.HIT.1.A.i.2: Compare the various types and sizes of motherboards.	BIT.HIT.1.A.a.2: Identify basic compatibility guidelines of the motherboard, processors, and memory.
	BIT.HIT.1.A.b.3: Demonstrate proper procedures for installing and configuring common peripheral devices.	BIT.HIT.1.A.i.3: Identify the purpose and characteristics of common system components: storage devices, power supply, removable media, expansion cards, CPU, memory, cooling systems, ports, etc.	BIT.HIT.1.A.a.3: Demonstrate basic procedures for adding and removing common system components and for recognizing associated cable connections.
	BIT.HIT.1.A.b.4: Select components to build a custom computer to meet the specifications of the end user.	BIT.HIT.1.A.i.4: Select components to upgrade a computer to meet the needs of the user.	BIT.HIT.1.A.a.4: Identify CPU chip types, manufacturers, and associated sockets.
	BIT.HIT.1.A.b.5: Demonstrate safe working conditions and best practices when working on electronic equipment.	BIT.HIT.1.A.i.5: Determine the cost-benefit of replacement or repair of hardware and software.	BIT.HIT.1.A.a.5: Identify operational characteristics of RAM.
		BIT.HIT.1.A.i.6: Disassemble,	



Standard: BIT.HIT.1

Students will select, build, upgrade, configure, and maintain a personal computer and common peripheral devices.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		reassemble, and configure a personal computer for proper hardware and software operation.	
		BIT.HIT.1.A.i.7: Explain CPU operations such as Hyper-Threading Technology and HyperTransport.	BIT.HIT.1.A.a.7: Identify the responsibilities of the various components of the motherboard: integrated ports, expansion slots, chipsets, battery, etc.
	BIT.HIT.1.A.b.8: Calculate the total wattage of components in a computer system and recommend an appropriately sized power supply.	BIT.HIT.1.A.i.8: Calculate the total wattage of components in a computer system and recommend an appropriately sized power supply.	BIT.HIT.1.A.a.8: Describe power-on self-test (POST), basic input/output system (BIOS), unified extensible firmware interface (UEFI), and complementary metal oxide semiconductor (CMOS), and explain their roles in a computer system.
	BIT.HIT.1.A.b.9: Identify and describe the purpose of various tools, diagnostic equipment, and materials used in computer maintenance.	BIT.HIT.1.A.i.9: Identify and describe the purpose of various tools, diagnostic equipment, and materials used in computer maintenance.	BIT.HIT.1.A.a.9: Apply basic electric theories: Ohm's Law; calculation of wattage, voltage, amperage, resistance, capacitance, etc.
BIT.HIT.1.B: Perform troubleshooting and preventive maintenance on personal computers.	BIT.HIT.1.B.b.1: Explain the importance of consistent preventative maintenance on computers.	BIT.HIT.1.B.i.1: Apply software upgrades, service packs, and patches.	BIT.HIT.1.B.a.1: Resolve common PC and/or peripheral device problems through a systematic

Standard: BIT.HIT.1

Students will select, build, upgrade, configure, and maintain a personal computer and common peripheral devices.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			troubleshooting process, and document solutions.
	BIT.HIT.1.B.b.2: Explain how to upgrade components in a computer system to meet the needs of an end user.	BIT.HIT.1.B.i.2: Explain how environmental factors, including heat, airborne particulates, humidity, vibration, and shocks, can affect equipment.	BIT.HIT.1.B.a.2: Perform troubleshooting and preventive maintenance on personal computers.
	BIT.HIT.1.B.b.3: Explain the importance of proper disposal and safe handling of equipment and supplies.	BIT.HIT.1.B.i.3: Follow procedures for preventive maintenance of computers and peripherals: physical cleaning, data backup, security and operating system updates, etc.	BIT.HIT.1.B.a.3: Verify BIOS and UEFI settings when booting the computer and use system beep codes to troubleshoot hardware problems.
BIT.HIT.1.C: Install, configure, manage, maintain, and troubleshoot Windows operating systems.	BIT.HIT.1.C.b.1: Explain operating system requirements.	BIT.HIT.1.C.i.1: Install a Windows operating system.	BIT.HIT.1.C.a.1: Create a partition using the Disk Management Utility.
	BIT.HIT.1.C.b.2: Explain the purpose of an operating system.	BIT.HIT.1.C.i.2: Configure the Windows Desktop and File Explorer.	BIT.HIT.1.C.a.2: Configure windows settings using Control panels.
		BIT.HIT.1.C.i.3: Perform routine preventative maintenance on a computer running a Windows operating system.	BIT.HIT.1.C.a.3: Use Windows tools and utilities to manage Windows systems.
		BIT.HIT.1.C.i.4: Describe redundant array of independent disks (RAID) levels and how they are used to improve	BIT.HIT.1.C.a.4: Use the Windows command line and PowerShell tools.

Standard: BIT.HIT.1

Students will select, build, upgrade, configure, and maintain a personal computer and common peripheral devices.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		reliability and capacity of storage devices.	
			BIT.HIT.1.C.a.5: Explain how to perform troubleshooting on a Windows operating system.
			BIT.HIT.1.C.a.6: Configure RAID on a desktop PC.
BIT.HIT.1.D: Configure, secure, and troubleshoot mobile, Mac, and Linux operating systems.	BIT.HIT.1.D.b.1: Compare the differences and similarities between Windows, Mac, and Linux operating systems.	BIT.HIT.1.D.i.1: Explain the purpose and characteristics of mobile operating systems.	BIT.HIT.1.D.a.1: Use the Linux terminal window tools.
		BIT.HIT.1.D.i.2: Explain methods for securing mobile devices.	BIT.HIT.1.D.a.2: Explain how to perform basic troubleshooting on Mac and Linux operating systems.
BIT.HIT.1.E: Configure and troubleshoot laptops and mobile devices.	BIT.HIT.1.E.b.1: Explain the purpose and characteristics of various mobile devices.	BIT.HIT.1.E.i.1: Explain the features and functions of laptops and mobile devices.	BIT.HIT.1.E.a.1: Configure laptop power settings and wireless settings.
	BIT.HIT.1.E.b.2: Identify the purpose and characteristics of mobile device components: power supply, removable media, screens, batteries, speakers, ports, etc.	BIT.HIT.1.E.i.2: Explain how to remove and install laptop components.	BIT.HIT.1.E.a.2: Perform common preventive maintenance on laptops and mobile devices.
			BIT.HIT.1.E.a.3: Troubleshoot laptop and mobile device problems and

Standard: BIT.HIT.1

Students will select, build, upgrade, configure, and maintain a personal computer and common peripheral devices.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			implement solutions.
BIT.HIT.1.F: Describe virtualization and cloud computing services.	BIT.HIT.1.F.b.1: Describe cloud services and how they can be used.	BIT.HIT.1.F.i.1: Explain the purpose of hypervisors in the implementation of a virtual machine.	BIT.HIT.1.F.a.1: Set up a client-side virtual machine (VM) on Windows and install an operating system on the VM.
	BIT.HIT.1.F.b.2: Explain the advantages of using virtualization.	BIT.HIT.1.F.i.2: Explain the advantages of using virtualization.	BIT.HIT.1.F.a.2: Compare the difference between type 1 and type 2 hypervisors.
	BIT.HIT.1.F.b.3: Explain characteristics of public, private, hybrid, and community cloud computing.	BIT.HIT.1.F.i.3: Compare various cloud services: Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS).	BIT.HIT.1.F.a.3: Explain the advantages of utilizing cloud services in an organization.
BIT.HIT.1.G: Install and maintain printers.	BIT.HIT.1.G.b.1: Compare the advantages and disadvantages of various printer technologies, and select an appropriate printer based on the user's needs.	BIT.HIT.1.G.i.1: Explain how laser, inkjet, thermal, impact, and 3D printers work.	BIT.HIT.1.G.a.1: Explore connection options for printers and peripherals: wired versus wireless, cable options, etc.
		BIT.HIT.1.G.i.2: Install a printer and configure printer-sharing over a network.	BIT.HIT.1.G.a.2: Troubleshoot and fix common printer problems.
BIT.HIT.1.H: Explain the roles and responsibilities of an IT professional.	BIT.HIT.1.H.b.1: Explain why good communication skills are a critical part of IT work.		BIT.HIT.1.H.a.1: Explain appropriate behavior when faced with the legal and ethical issues that arise in the

Standard: BIT.HIT.1

Students will select, build, upgrade, configure, and maintain a personal computer and common peripheral devices.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			IT industry.
		BIT.HIT.1.H.i.2: Explain the call center environment and technician responsibilities.	BIT.HIT.1.H.a.2: Identify and use help desk software to document tech support solutions.

Standard: BIT.HIT.2

Students will select, install, and configure network components to implement and maintain a functional network.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.HIT.2.A.b.1: Identify hardware components of a network.	BIT.HIT.2.A.i.1: Identify and explain the purpose of devices on a network of common network hardware.	BIT.HIT.2.A.a.1: Identify and differentiate between various network topologies.
BIT.HIT.2.A: Explain common network hardware and how computers communicate on a network.		BIT.HIT.2.A.i.2: Construct a network diagram to be deployed in a specified environment.	BIT.HIT.2.A.a.2: Identify and configure common hardware used for establishing network connectivity such as routers, wireless access points, switches, hubs, modems, repeaters, patch panels, mesh networks, and other emerging connection technologies.



Standard: BIT.HIT.2

Students will select, install, and configure network components to implement and maintain a functional network.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		BIT.HIT.2.A.i.3: Explain the purpose of various servers: dynamic host configuration protocol (DHCP) and domain name system (DNS) servers, print servers, file servers, web servers, mail servers, proxy servers, authentication servers, etc.	BIT.HIT.2.A.a.3: Explain the purpose and characteristics of transport layer protocols.
		BIT.HIT.2.A.i.4: Explain MAC and IP addressing for computer networks.	BIT.HIT.2.A.a.4: Explain the significance of application port numbers.
			BIT.HIT.2.A.a.5: Configure Internet of Things (IoT) devices.
BIT.HIT.2.B: Configure devices to communicate on a network.	BIT.HIT.2.B.b.1: Identify basic network protocols: hypertext transfer protocol (HTTP)/hypertext transfer protocol secure (HTTPS), simple mail transfer protocol (SMTP), internet messaging access protocol (IMAP), file transfer protocol (FTP).	BIT.HIT.2.B.i.1: Identify and explain network protocols, standards, and services.	BIT.HIT.2.B.a.1: Determine the gateway, network, and broadcast addresses of a given network.
	BIT.HIT.2.B.b.2: Research and describe the history of the internet.	BIT.HIT.2.B.i.2: Build a network cable.	BIT.HIT.2.B.a.2: Identify and explain the transmission control protocol

Standard: BIT.HIT.2

Students will select, install, and configure network components to implement and maintain a functional network.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			(TCP)/internet protocol (IP) model layers.
		BIT.HIT.2.B.i.3: Configure a Windows computer to work on a network.	BIT.HIT.2.B.a.3: Create an IP addressing system for a class A, B, and/or C network using standard subnet masks.
		BIT.HIT.2.B.i.4: Explain the characteristics and purpose of common types of network cables and connectors.	BIT.HIT.2.B.a.4: Configure devices for wired and wireless networks.
		BIT.HIT.2.B.i.5: Convert binary, decimal, and hexadecimal numbers.	BIT.HIT.2.B.a.5: Configure wireless security and authentication methods on a home Wi-Fi router.
		BIT.HIT.2.B.i.6: Explain wireless connection technologies: Wi-Fi, cellular, Bluetooth, radio frequency identification (RFID), near field communication (NFC), and Zigbee/Z-wave.	BIT.HIT.2.B.a.6: Explain wireless protocols and network services.
		BIT.HIT.2.B.i.7: Compare IPv4 and IPv6 network addressing.	BIT.HIT.2.B.a.7: Grant and control access to files, directories, and shared network resources.

Standard: BIT.HIT.2

Students will select, install, and configure network components to implement and maintain a functional network.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			BIT.HIT.2.B.a.8: Create, maintain, and implement policies for users and groups.
BIT.HIT.2.C: Troubleshoot problems and solutions related to networks and perform routine preventive maintenance.		BIT.HIT.2.C.i.1: Assist peers with network connection problems.	BIT.HIT.2.C.a.1: Update firmware in network devices.
		BIT.HIT.2.C.i.2: Explain the importance of consistent preventative maintenance on network components.	BIT.HIT.2.C.a.2: Troubleshoot network connectivity and configuration issues and implement solutions.
BIT.HIT.2.D: Implement basic device, host, data, and network security.	BIT.HIT.2.D.b.1: Describe different types of malware and how to protect against malicious software.	BIT.HIT.2.D.i.1: Explain what a security policy is and how to employ physical security measures that protect data.	BIT.HIT.2.D.a.1: Explain common communication encryption types.
	BIT.HIT.2.D.b.2: Describe different types of network attacks.	BIT.HIT.2.D.i.2: Explain how file and folder encryption can be used to protect data.	BIT.HIT.2.D.a.2: Configure basic security settings and policies for end devices.
	BIT.HIT.2.D.b.3: Describe different social engineering attacks.	BIT.HIT.2.D.i.3: Explain how virus protection software works.	BIT.HIT.2.D.a.3: Configure wireless devices for secure communication.
	BIT.HIT.2.D.b.4: Describe the purpose of virus protection software.	BIT.HIT.2.D.i.4: Contrast the difference between a software and a hardware firewall.	BIT.HIT.2.D.a.4: Perform troubleshooting and routine preventive maintenance to improve and maintain

Standard: BIT.HIT.2

Students will select, install, and configure network components to implement and maintain a functional network.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			network security.
	BIT.HIT.2.D.b.5: Describe the purpose of a firewall.	BIT.HIT.2.D.i.5: Explain the importance of consistent preventive maintenance on network system software and firmware.	

Strand: IT Foundations (IT)

Standard: BIT.IT.1

Students will apply appropriate computer applications to meet personal and business needs.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.IT.1.A: Use various input technologies to enter and manipulate information appropriately.	BIT.IT.1.A.b.1: Demonstrate correct finger placement and reaches on an alphanumeric keyboard. Recommended minimum proficiency: 5 wpm x grade level.	BIT.IT.1.A.i.1: Prepare documents in a timely fashion without errors.	BIT.IT.1.A.a.1: Demonstrate the touch method of keyboarding on an alphanumeric keyboard at acceptable speed and accuracy levels. Recommended minimum proficiency: 5 wpm x grade level.
	BIT.IT.1.A.b.2: Enter data into various digital devices	BIT.IT.1.A.i.2: Apply a variety of input technologies to maximize productivity.	BIT.IT.1.A.a.2: Demonstrate proper touch method on a numeric keypad.
			BIT.IT.1.A.a.3: Describe proper ergonomics and repetitive stress issues related to input technologies.
BIT.IT.1.B: Use word processing applications to organize and effectively communicate information.	BIT.IT.1.B.b.1: Apply reviewing features of a word processor: spell check, grammar check, word count, and thesaurus.	BIT.IT.1.B.i.1: Utilize templates, themes, and styles to improve productivity and efficiency.	BIT.IT.1.B.a.1: Apply advanced editing and formatting features: find/replace, paragraph, column layout, and pagination options.
	BIT.IT.1.B.b.2: Produce functional and properly formatted business documents.	BIT.IT.1.B.i.2: Create and modify tables.	BIT.IT.1.B.a.2: Perform a mail merge to produce documents, emails, labels, envelopes, and catalogs.



Standard: BIT.IT.1

Students will apply appropriate computer applications to meet personal and business needs.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.IT.1.B.b.3: Customize documents using formatting elements: alignment, spacing, borders, and lists.	BIT.IT.1.B.i.3: Modify basic document properties.	BIT.IT.1.B.a.3: Enhance usability of documents with advanced tools: bookmarks, hyperlinks, page and section breaks, headers, and footers.
		BIT.IT.1.B.i.4: Insert and modify graphic elements: pictures, video, audio, SmartArt, 3D models, and screenshots.	BIT.IT.1.B.a.4: Create custom document elements such as Quickparts, themes, color, and style sets.
			BIT.IT.1.B.a.5: Create and manage forms, fields, and controls.
			BIT.IT.1.B.a.6: Create and manage references in a document: footnotes, endnotes, index entries, figure and table captions, citations, and sources.
			BIT.IT.1.B.a.7: Utilize document properties to protect a document, inspect the document for accessibility and compatibility issues, and manage version history.
			BIT.IT.1.B.a.8: Create and modify macros to automate processes.

Standard: BIT.IT.1

Students will apply appropriate computer applications to meet personal and business needs.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			BIT.IT.1.B.a.9: Collaborate on documents using multi-user features: tracking changes, merging documents, and online collaboration.
BIT.IT.1.C: Use spreadsheet applications to solve problems and effectively communicate information.	BIT.IT.1.C.b.1: Enter data into a spreadsheet.	BIT.IT.1.C.i.1: Generate and apply advanced formulas utilizing mathematical operators and functions to perform calculations.	BIT.IT.1.C.a.1: Perform logical operations in formulas using nested, lookup, and date and time functions.
	BIT.IT.1.C.b.2: Illustrate data using graphs and charts.	BIT.IT.1.C.i.2: Create, modify, and analyze information in charts.	BIT.IT.1.C.a.2: Import data into a spreadsheet from external sources.
	BIT.IT.1.C.b.3: Enhance a spreadsheet visually using fonts, colors, and cell properties.	BIT.IT.1.C.i.3: Set the print area, headers, and footers for a workbook.	BIT.IT.1.C.a.3: Perform what-if analysis using Goal Seek and Scenario Manager.
	BIT.IT.1.C.b.4: Construct basic formulas and use common functions to perform calculations.	BIT.IT.1.C.i.4: Modify, organize, and analyze data relevant to a specific business problem by utilizing sorts and filters.	BIT.IT.1.C.a.4: Create and modify pivot tables to analyze and summarize data.
		BIT.IT.1.C.i.5: Create formulas that use relative, absolute, and mixed references.	BIT.IT.1.C.a.5: Create and modify pivot charts to illustrate pivot table data.
		BIT.IT.1.C.i.6: Summarize numerical and graphic data using sparklines, conditional formatting, and data validation.	BIT.IT.1.C.a.6: Calculate and summarize data using subtotals and totals.

Standard: BIT.IT.1

Students will apply appropriate computer applications to meet personal and business needs.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		BIT.IT.1.C.i.7: Troubleshoot formulas using trace precedence and dependence.	BIT.IT.1.C.a.7: Define and reference named ranges within a workbook.
		BIT.IT.1.C.i.8: Fill cells using flash fill and advanced fill series options.	BIT.IT.1.C.a.8: Utilize Autofill and generate numeric data using functions such as RANDBETWEEN and SEQUENCE.
		BIT.IT.1.C.i.9: Customize options and views including freezing worksheet rows and columns, changing window views, and displaying formulas.	BIT.IT.1.C.a.9: Create and modify advanced charts: box and whisker, combination, funnel, histogram, sunburst, and waterfall charts.
		BIT.IT.1.C.i.10: Manage and use data among multiple worksheets and workbooks.	BIT.IT.1.C.a.10: Automate tasks using macros.
BIT.IT.1.D: Use digital presentation applications to create and deliver a presentation.	BIT.IT.1.D.b.1: Create and deliver a digital presentation.	BIT.IT.1.D.i.1: Modify design templates with custom layout, text, color, and backgrounds.	BIT.IT.1.D.a.1: Modify slide, handout, and note masters.
	BIT.IT.1.D.b.2: Insert slides, and apply layouts, transitions, and animations.	BIT.IT.1.D.i.2: Create non-linear presentations using hyperlinks.	BIT.IT.1.D.a.2: Use object linking and embedding to incorporate other resources into a presentation.
	BIT.IT.1.D.b.3: Order, align, and group slide content.	BIT.IT.1.D.i.3: Present slide shows using presenter view.	BIT.IT.1.D.a.3: Configure and present slide shows using slide show timing, narration and recording options, captions and subtitles, cameos, and screen

Standard: BIT.IT.1

Students will apply appropriate computer applications to meet personal and business needs.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			recording.
	BIT.IT.1.D.b.4: Insert and format tables, charts, pictures, SmartArt, 3D models, and media into presentations.	BIT.IT.1.D.i.4: Order and group slides, create sections, and hide and unhide slides in a presentation.	BIT.IT.1.D.a.4: Enhance usability of a presentation by using notes pages, comments, action buttons, and custom shows.
		BIT.IT.1.D.i.5: Configure print settings for presentations: slides, note pages, and handouts.	BIT.IT.1.D.a.5: Prepare presentations for collaboration and distribution: editing restrictions, using inspection tools to prevent issues, and export presentations to other formats.
BIT.IT.1.E: Organize, manage, and maintain information using a database management system.	BIT.IT.1.E.b.1: Define terminology related to databases: data, fields, records, tables, reports, and queries.	BIT.IT.1.E.i.1: Create tables with appropriate data field types.	BIT.IT.1.E.a.1: Create tables with appropriate data types and sizes, validation rules, and input masks.
	BIT.IT.1.E.b.2: Collect data suitable for a database and recognize how information is sorted.	BIT.IT.1.E.i.2: Define and create a relational database that utilizes primary keys and enforces referential integrity.	BIT.IT.1.E.a.2: Import data from external sources and other databases.
	BIT.IT.1.E.b.3: Create a single table database.	BIT.IT.1.E.i.3: Create and execute simple queries and sorting to find and summarize information in a database.	BIT.IT.1.E.a.3: Create, modify, run, and save advanced multi-table, crosstab, parameter, and action queries.
	BIT.IT.1.E.b.4: Create and edit	BIT.IT.1.E.i.4: Create and	BIT.IT.1.E.a.4: Create and

Standard: BIT.IT.1

Students will apply appropriate computer applications to meet personal and business needs.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	record data in a database.	modify forms in layout view to enable users to easily enter information.	modify forms: tab order, form positioning, images, and form control properties.
		BIT.IT.1.E.i.5: Create and format a database report to present information.	BIT.IT.1.E.a.5: Create and format reports that include grouping and sorting fields, multi-column layouts, headers, and footers.
		BIT.IT.1.E.i.6: Configure print options for records, forms, and reports.	BIT.IT.1.E.a.6: Analyze information retrieved from a database to make a recommendation for a business situation.
			BIT.IT.1.E.a.7: Use structured query language (SQL) commands to insert, delete, update, and query a database.
			BIT.IT.1.E.a.8: Explain how database systems are a necessary component in the development of dynamic web applications: social media, e-business, etc.
			BIT.IT.1.E.a.9: Utilize database information to complete a mail merge.
BIT.IT.1.F: Use the Internet and common productivity applications to	BIT.IT.1.F.b.1: Use an email application to create an email	BIT.IT.1.F.i.1: Use an email application to create emails	BIT.IT.1.F.a.1: Use productivity features of an

Standard: BIT.IT.1

Students will apply appropriate computer applications to meet personal and business needs.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
maximize communication, collaboration, and social interactions in a professional manner.	message, and respond to emails using reply, reply all, and forward appropriately.	using to, cc, and bcc addressing, and include attachments.	email application: signatures, labels and folders, filters, and autoresponders.
	BIT.IT.1.F.b.2: Add, manage and delete email contacts.	BIT.IT.1.F.i.2: Create email contact groups and add, manage, and delete contacts in the group.	BIT.IT.1.F.a.2: Manage incoming email using a productivity system: Inbox Zero, Getting to Done, etc.
	BIT.IT.1.F.b.3: Use a calendar application to create a calendar and schedule a calendar events.	BIT.IT.1.F.i.3: Use a calendar application to schedule and invite guests to a meeting, set availability for calendar items, and share a calendar with other people.	BIT.IT.1.F.a.3: Schedule and host a videoconference utilizing collaboration features: participant management, chat, screen sharing, shared whiteboard, breakout rooms, and polls.
	BIT.IT.1.F.b.4: Manage speaker, microphone, and camera settings while participating in a videoconference.	BIT.IT.1.F.i.4: Create and manage tasks and subtasks with due dates using a task management application.	BIT.IT.1.F.a.4: Manage document collaboration settings and collaborate on projects using cloud applications.
		BIT.IT.1.F.i.5: Use videoconferencing software to schedule, invite participants, and host a videoconference.	
		BIT.IT.1.F.i.6: Demonstrate professional business standards when using electronic communication methods.	
BIT.IT.1.G: Use basic operating system	BIT.IT.1.G.b.1: Create, move,	BIT.IT.1.G.i.1: Identify and	BIT.IT.1.G.a.1: Install,

Standard: BIT.IT.1

Students will apply appropriate computer applications to meet personal and business needs.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
features to manage applications, files, folders, and settings.	copy, delete, and rename files and folders on desktop and cloud systems.	explain the purpose of file name extensions and file formats.	uninstall, update, and repair desktop or mobile device applications.
	BIT.IT.1.G.b.2: Manage printing options: printing specific pages, multiple pages per sheet, paper size, orientation, and print to PDF.	BIT.IT.1.G.i.2: Configure screen resolution, desktop wallpaper, and multiple screen settings.	BIT.IT.1.G.a.2: Synchronize files between devices using the cloud.
		BIT.IT.1.G.i.3: Compare differences between Windows, Mac, Linux, IOS, and Android operating systems.	BIT.IT.1.G.a.3: Copy a file to and from a network share, cloud storage location, and portable storage drive.
		BIT.IT.1.G.i.4: Explain the purpose and importance of antivirus software and a firewall.	
BIT.IT.1.H: Demonstrate respectful, responsible, inclusive, and ethical digital citizenship.	BIT.IT.1.H.b.1: Identify and explore basic privacy issues associated with technology and explore the risks and dangers of sharing personal information in a digital world.	BIT.IT.1.H.i.1: Discuss basic issues related to responsible use of technology and describe personal or legal consequences of inappropriate use.	BIT.IT.1.H.a.1: Recognize the importance of one's digital footprint and how to manage it professionally.
	BIT.IT.1.H.b.2: Evaluate a digital source in terms of accuracy, relevance, bias, and comprehensiveness of the retrieved information.	BIT.IT.1.H.i.2: Demonstrate respectful and responsible use and creation of media and technology.	BIT.IT.1.H.a.2: Analyze legal and ethical dilemmas within the framework of current laws and legislation: hacking, threats, phishing, the use of artificial intelligence, etc.
		BIT.IT.1.H.i.3: Demonstrate	BIT.IT.1.H.a.3: Recognize

Standard: BIT.IT.1

Students will apply appropriate computer applications to meet personal and business needs.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		the appropriate and legal use of intellectual property.	and explain responsible use of digital commerce.
		BIT.IT.1.H.i.4: Demonstrate appropriate behavior and standards when using information technologies.	BIT.IT.1.H.a.4: Compare and contrast various types of license agreements: open source, Creative Commons, multiple license agreements, single-user installation, site license.

Strand: Management (MAN)

Standard: BIT.MAN.1			
Students will describe business management functions and examine their implementation in business.			
Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.MAN.1.A: Development management’s role in leadership and organization of a business.	BIT.MAN.1.A.b.1: Discuss the different roles that an organization has.	BIT.MAN.1.A.i.1: Identify levels of management within an organization.	BIT.MAN.1.A.a.1: Evaluate the roles and levels of authority and their relationships within an organization.
	BIT.MAN.1.A.b.2: Identify characteristics of great leaders.	BIT.MAN.1.A.i.2: Identify different management styles.	BIT.MAN.1.A.a.2: Explain traits and skills required of effective leadership.
	BIT.MAN.1.A.b.3: List the roles and responsibilities of people you come in contact with.	BIT.MAN.1.A.i.3: Identify various management theories and discuss how they impact motivation in business.	BIT.MAN.1.A.a.3: Compare and contrast various management theories.
	BIT.MAN.1.A.b.4: Outline different ways to organize a group.		BIT.MAN.1.A.a.4: Describe management roles including the relationship between the management functions of planning, organizing, leading or directing, and evaluating.
		BIT.MAN.1.A.i.5: Illustrate how an organization might change in structure.	BIT.MAN.1.A.a.5: Summarize the evolution of organizational structures due to external and internal forces.
BIT.MAN.1.B: Examine the importance of evaluating to achieve a desired outcome.	BIT.MAN.1.B.b.1: List different ways to feel successful.	BIT.MAN.1.B.i.1: Explain different methods of measuring success.	BIT.MAN.1.B.a.1: Describe the importance of evaluating success in business.

Standard: BIT.MAN.1

Students will describe business management functions and examine their implementation in business.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		BIT.MAN.1.B.i.2: Apply a method of measuring if a goal has been achieved.	BIT.MAN.1.B.a.2: Construct and defend a method of evaluating the attainment of a goal.
	BIT.MAN.1.B.b.3: Rank businesses based on a performance measure.	BIT.MAN.1.B.i.3: Calculate a performance measure for a business and compare it to industry benchmarks.	BIT.MAN.1.B.a.3: Experiment with different performance measures of a business compared to industry benchmarks.
	BIT.MAN.1.B.b.4: Distinguish between opportunities for revising or re-attempting the achievement of goals versus one-time opportunities.	BIT.MAN.1.B.i.4: Describe action that can be taken when a goal is not achieved.	BIT.MAN.1.B.a.4: Summarize the importance of taking action when performance results are not acceptable.
			BIT.MAN.1.B.a.5: Identify and discuss motivational and management theories: Maslow, Herzberg, McClelland, Taylor, Weber, Follett, McGregor.
BIT.MAN.1.C: Relate planning to the success of an organization's goals.			BIT.MAN.1.C.a.1: Discuss planning tools and summarize the importance of organizing activities to accomplish desired goals.
	BIT.MAN.1.C.b.2: Produce a plan to accomplish a goal.	BIT.MAN.1.C.i.2: Produce a multi-step plan to accomplish a goal, and rate from different points of view.	BIT.MAN.1.C.a.2: Examine the importance of setting a vision, mission, goals, values, and objectives within an organization.

Standard: BIT.MAN.1

Students will describe business management functions and examine their implementation in business.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	BIT.MAN.1.C.b.3: Identify the consequences of not planning.	BIT.MAN.1.C.i.3: Model the use of a plan toward the achievement of a project.	BIT.MAN.1.C.a.3: Analyze various business plans to determine whether they are aligned with the business vision, mission, and goals.
		BIT.MAN.1.C.i.4: Compare managerial decision-making techniques.	BIT.MAN.1.C.a.4: Analyze outcomes that are a result of decisions.
	BIT.MAN.1.C.b.5: List measures of success and discuss how they might apply to different situations.	BIT.MAN.1.C.i.5: Defend a decision using data.	BIT.MAN.1.C.a.5: Describe methods of evaluating an organization's performance and controlling the organization in various situations.

Standard: BIT.MAN.2

Students will examine organizational structures for businesses and use operations and production principles for effective operation of the business.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.MAN.2.A: Compare and contrast organizational structures within businesses.	BIT.MAN.2.A.b.1: Describe the different roles that individuals play on an effective team.	BIT.MAN.2.A.i.1: Design a team to achieve a goal that includes various roles and functions.	BIT.MAN.2.A.a.1: Identify different levels of management; explain the purpose of organizational charts and the interrelationship of the

Standard: BIT.MAN.2

Students will examine organizational structures for businesses and use operations and production principles for effective operation of the business.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			various levels.
	BIT.MAN.2.A.b.2: Categorize businesses by the different products, services, and types of customers.	BIT.MAN.2.A.i.2: Identify businesses in commercial, industrial, and service areas.	BIT.MAN.2.A.a.2: Distinguish between commercial, industrial, and service businesses.
	BIT.MAN.2.A.b.3: Label the different departments within an organization and discuss their importance to the organization as a whole.		BIT.MAN.2.A.a.3: Describe and diagram the interrelationships within an organization's departments.
BIT.MAN.2.B: Analyze the processes and systems that operations managers implement to monitor, plan, and control business activities required for continued business functioning.	BIT.MAN.2.B.b.1: Discuss how products are designed to meet the customer's desires.	BIT.MAN.2.B.i.1: Create a simple design for a product and list the required tools and materials.	BIT.MAN.2.B.a.1: Examine various methods of designing and redesigning products, the steps of the process, and the tools needed.
	BIT.MAN.2.B.b.2: Distinguish among various suppliers that provide businesses with needed supplies or services.	BIT.MAN.2.B.i.2: Illustrate the steps needed to efficiently and effectively make a product.	BIT.MAN.2.B.a.2: Examine aspects of scheduling, including the efficiency and effectiveness of a production schedule.
	BIT.MAN.2.B.b.3: List items that a business might buy and estimate the quantity of each item they should have.	BIT.MAN.2.B.i.3: Analyze supplier choices and select the best fitting supplier.	BIT.MAN.2.B.a.3: Describe the role that suppliers play in providing materials and what factors are used in selecting a supplier: price, quality,



Standard: BIT.MAN.2

Students will examine organizational structures for businesses and use operations and production principles for effective operation of the business.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
			availability, reliability.
	BIT.MAN.2.B.b.4: Indicate different quality levels of products that consumers can choose.	BIT.MAN.2.B.i.4: Contrast the cost versus benefit of buying supply quantities.	BIT.MAN.2.B.a.4: Value the purpose of inventory control, and list different methods of inventory control.
	BIT.MAN.2.B.b.5: Discuss how a business produces a product.	BIT.MAN.2.B.i.5: Discriminate between different quality levels of a given product.	BIT.MAN.2.B.a.5: Examine the idea of quality management and relate it to how businesses compete.
		BIT.MAN.2.B.i.6: Summarize a business's factors of production: design, scheduling, materials procurement, inventory management, and quality control measures.	BIT.MAN.2.B.a.6: Explain the relationship between factors of production: design, scheduling, purchasing, inventory management and quality control measures.

Standard: BIT.MAN.3

Students will examine the role of the human resource department and its function as a means to achieving management’s goals.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.MAN.3.A: Appraise the importance of the human resources department in the planning, recruitment, selection, and orientation of employees.		BIT.MAN.3.A.i.1: Explain how human resource staff can help a business develop its workforce.	BIT.MAN.3.A.a.1: Identify legislation affecting the hiring process: affirmative action, right to privacy, and Americans with Disabilities Act.
		BIT.MAN.3.A.i.2: Develop appropriate hiring criteria for a specific job.	BIT.MAN.3.A.a.2: Select appropriate job applicant screening techniques for a variety of positions.
		BIT.MAN.3.A.i.3: Discuss employment contracts.	BIT.MAN.3.A.a.3: Describe the common traits of an employment contract.
		BIT.MAN.3.A.i.4: Design an effective onboarding procedure for a new employee.	BIT.MAN.3.A.a.4: Design a specific training plan to meet training needs of an organization.
BIT.MAN.3.B: Assess methods for evaluating employees’ performance and determining compensation, benefits, incentives, and promotion.		BIT.MAN.3.B.i.1: Give examples of the benefits of professional development.	BIT.MAN.3.B.a.1: Analyze the benefits of professional development to the employer and the employee.
	BIT.MAN.3.B.b.2: Discuss different methods of motivating people to perform.	BIT.MAN.3.B.i.2: Illustrate several stages for an individual to gradually develop, maintain, and improve work-based employment skills.	BIT.MAN.3.B.a.2: Outline several stages of employee development within an organization: professional development, cross-training, evaluation, and goal setting.



Standard: BIT.MAN.3

Students will examine the role of the human resource department and its function as a means to achieving management's goals.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		BIT.MAN.3.B.i.3: Demonstrate how goal setting relates to employee achievement or accomplishment.	BIT.MAN.3.B.a.3: Explain how employees' performance is evaluated, incentivized, and related to compensation and benefits.
		BIT.MAN.3.B.i.4: Identify jobs that use varying types of performance measures to compensate employees.	BIT.MAN.3.B.a.4: Review employee compensation plans that may be used to calculate compensation: benefit packages, incentive programs, and performance measures.
		BIT.MAN.3.B.i.5: Generalize the difference between promoting an employee from within a business versus hiring from outside.	BIT.MAN.3.B.a.5: Compare and contrast promoting an employee from within a business versus hiring from outside.
BIT.MAN.3.C: Recognize the human resource department's activities relating to employee safety and equal treatment among employees, as required by laws and regulations.		BIT.MAN.3.C.i.1: Explain the human resources department's role in advocating for the employees.	BIT.MAN.3.C.a.1: Summarize the value of the human resource department's advocacy for employees.
		BIT.MAN.3.C.i.2: Examine concerns for safety and health.	BIT.MAN.3.C.a.2: Evaluate health and safety issues related to the workplace.

Standard: BIT.MAN.3

Students will examine the role of the human resource department and its function as a means to achieving management’s goals.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
		BIT.MAN.3.C.i.3: Infer the impact of a legal issue on the classroom environment and a business environment.	BIT.MAN.3.C.a.3: Review legal issues—harassment, employee rights, privacy, drug testing, labor disputes, child labor, discrimination, and substance abuse—and the potential impact to the business.
BIT.MAN.3.D: Describe human resources’ involvement in the termination and transition of employees.		BIT.MAN.3.D.i.1: Discuss reasons why businesses reduce their workforce.	BIT.MAN.3.D.a.1: Examine internal and external reasons for termination.
			BIT.MAN.3.D.a.2: Explain business obligations for displacing or transitioning employees.

Strand: Marketing (MKT)

Standard: BIT.MKT.1

Students will review, utilize, and develop the four areas of the marketing mix as they relate to a given industry.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.MKT.1.A: Product – Generate product ideas to contribute to ongoing business success.	BIT.MKT.1.A.b.1: Identify customer needs and why they return to the same business.	BIT.MKT.1.A.i.1: Examine ways businesses use marketing to build customer demand.	BIT.MKT.1.A.a.1: Recognize the laws that protect customers and/or constrain marketing activities.
	BIT.MKT.1.A.b.2: Explain factors that influence customer buying behavior.	BIT.MKT.1.A.i.2: Identify the customer's rational and emotional buying motives and decisions.	BIT.MKT.1.A.a.2: Examine reasons for consumers to have brand loyalty.
	BIT.MKT.1.A.b.3: Identify new products and services for consumers focusing on current consumer trends.	BIT.MKT.1.A.i.3: Describe ways in which companies modify and improve existing products and services.	BIT.MKT.1.A.a.3: Analyze the difference in consumer wants and needs and how this drives product development and positioning.
	BIT.MKT.1.A.b.4: Explain the functions and elements of packaging.	BIT.MKT.1.A.i.4: Explain issues of ethics and social responsibility in packaging (e.g., sustainability, false and misleading claims, durability).	BIT.MKT.1.A.a.4: Illustrate package design as a product feature and analyze the functionality of packaging options.
	BIT.MKT.1.A.b.5: Define product life cycle.	BIT.MKT.1.A.i.5: Research the impact of the product life cycle on marketing decisions.	BIT.MKT.1.A.a.5: Assess strategies for managing a product through its life cycle and develop methods of extending the life cycle of products.

Standard: BIT.MKT.1

Students will review, utilize, and develop the four areas of the marketing mix as they relate to a given industry.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.MKT.1.B: Price – Describe the role of pricing in marketing and identify the factors that influence a product’s price.	BIT.MKT.1.B.b.1: Identify how price influences consumer purchase decisions.	BIT.MKT.1.B.i.1: Explain the factors that contribute to a product’s price (e.g., cost, quality, competitions, and brand loyalty).	BIT.MKT.1.B.a.1: Analyze the influences of supply and demand on pricing.
	BIT.MKT.1.B.b.2: Define pricing terms for products and services: cost, price, markup, expenses, and profit.	BIT.MKT.1.B.i.2: Calculate a product’s price using different pricing methods (e.g., cost-plus, competitive, value-based, price skimming, and penetration).	BIT.MKT.1.B.a.2: Derive pricing strategies based on company objectives (e.g., positioning, product line, loss leader, psychological, penetration, and skimming).
	BIT.MKT.1.B.b.3: Identify factors affecting pricing decisions.	BIT.MKT.1.B.i.3: Explain the relationship between price and perceived quality (the price-value relationship).	BIT.MKT.1.B.a.3: Analyze how evolving technologies provide greater options for buyers and increase price competition.
BIT.MKT.1.C: Place – Determine how businesses identify and make channel management/distribution strategy decisions to transport products to the final consumer.	BIT.MKT.1.C.b.1: Discuss different places where products or services can be purchased (e.g., on the Internet, brick and mortar, shopping center, catalog).	BIT.MKT.1.C.i.1: Describe the different distribution channels.	BIT.MKT.1.C.a.1: Compare and contrast direct and indirect marketing channels for various industries.
	BIT.MKT.1.C.b.2: Explain the different methods of	BIT.MKT.1.C.i.2: Explain the advantages and disadvantages	BIT.MKT.1.C.a.2: Describe how technology has

Standard: BIT.MKT.1

Students will review, utilize, and develop the four areas of the marketing mix as they relate to a given industry.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
	distribution.	of the five methods of distribution (rail, air, truck, ship, and pipeline) as it relates to types of products.	transformed marketing and distribution channels.
BIT.MKT.1.D: Promotion – Describe the concepts and strategies needed to communicate information about products to achieve a desired outcome.	BIT.MKT.1.D.b.1: Discuss ways advertising affects consumer purchases.	BIT.MKT.1.D.i.1: Identify methods for evaluating the effectiveness of various advertising media.	BIT.MKT.1.D.a.1: Develop an advertising campaign (e.g., commercials, Internet and social media ads, print, radio, outdoor).
	BIT.MKT.1.D.b.2: Discuss ethical issues in advertising.	BIT.MKT.1.D.i.2: Examine how culture influences global advertising.	BIT.MKT.1.D.a.2: Analyze which advertising goals (inform, persuade, remind) are appropriate for the stage a product has reached in its life cycle.
	BIT.MKT.1.D.b.3: Identify the elements of the promotional mix (advertising, sales promotion, public relations, and personal selling).	BIT.MKT.1.D.i.3: Explain the role of promotion as a marketing function.	BIT.MKT.1.D.a.3: Demonstrate how the elements of the promotional mix (advertising, sales promotion, public relations, personal selling) work together and how to apply it.
		BIT.MKT.1.D.i.4: Demonstrate an understanding of promotional channels used to communicate with targeted audiences.	BIT.MKT.1.D.a.4: Develop a promotional plan for a product/service.

Standard: BIT.MKT.2

Students will analyze target marketing concepts and strategies utilized to select and determine an audience for a product or business.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.MKT.2.A: Employ marketing information to develop a marketing plan.	BIT.MKT.2.A.b.1: Describe the need for marketing data.	BIT.MKT.2.A.i.1: Identify the components of a marketing plan.	BIT.MKT.2.A.a.1: Analyze a company's marketing plan.
	BIT.MKT.2.A.b.2: Identify what market segmentation is (demographics, psychographics, and geographics).	BIT.MKT.2.A.i.2: Evaluate the tools of market segmentation (e.g., demographics, psychographics, and geographics).	BIT.MKT.2.A.a.2: Explain ways that segmentation can be used to identify target markets.
		BIT.MKT.2.A.i.3: Analyze variables used to identify target markets (e.g., usage level, brand loyalty, and benefits sought).	BIT.MKT.2.A.a.3: Describe ways in which the increasing diversity of consumer populations impacts market segmentation, strategies, and targeting.
BIT.MKT.2.B: Apply marketing information to determine and meet customer needs.	BIT.MKT.2.B.b.1: Identify the reasons for conducting marketing research.	BIT.MKT.2.B.i.1: Explain why a marketing plan is essential.	BIT.MKT.2.B.a.1: Develop a comprehensive marketing plan for either a domestic or international product/service.
		BIT.MKT.2.B.i.2: Discuss how the marketing plan aligns with the company strategic plan.	BIT.MKT.2.B.a.2: Analyze a company's marketing plan.

Standard: BIT.MKT.3

Students will describe the concepts, systems, and tools needed to gather, access, synthesize, evaluate, and disseminate information for use in making business decisions.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.MKT.3.A: Describe the nature and scope of market research.	BIT.MKT.3.A.b.1: Discuss the reasons for conducting market research.	BIT.MKT.3.A.i.1: Practice the steps in the market research process.	BIT.MKT.3.A.a.1: Collect and analyze primary and secondary data for a new product/service proposal.
	BIT.MKT.3.A.b.2: Differentiate between primary and secondary data.	BIT.MKT.3.A.i.2: Identify methods for collecting primary data (e.g., surveys, experiments, focus groups, and observations).	BIT.MKT.3.A.a.2: Evaluate the advantages and disadvantages of different sampling methods.
		BIT.MKT.3.A.i.3: Differentiate among sampling methods.	BIT.MTK.3.A.a.3: Analyze the research goals for the different kinds of research instruments and when each is appropriate.
BIT.MKT.3.B: Design and apply a marketing research study to ensure the appropriateness of data collection efforts.	BIT.MKT.3.B.b.1: Create a research instrument.	BIT.MKT.3.B.i.1: Evaluate the steps involved in interpreting survey, focus group, interview, ethnography, and/or experiment data, including collecting, analyzing, and interpreting key findings.	BIT.MKT.3.B.a.1: Assemble marketing information to plan marketing, sales, and business activities.

Standard: BIT.MKT.4

Students will describe the techniques and strategies used to foster positive, ongoing relationships with customers.

Learning Priority	Performance Indicators (By Learning Progression)		
	Beginning (b)	Intermediate (i)	Advanced (a)
BIT.MKT.4.A: Foster positive relationships with customers to enhance company image and build sales.	BIT.MKT.4.A.b.1: Identify ways businesses show concern for their customers.	BIT.MKT.4.A.i.1: Examine the cost of obtaining new customers versus the cost of maintaining current customers.	BIT.MKT.4.A.a.1: Recognize how successful marketing strategy is built on positive customer relationships and understanding the target market.
	BIT.MKT.4.A.b.2: Explain why customer feedback is collected.	BIT.MKT.4.A.i.2: Describe data-collection methods (observations, mail, diaries, telephone, Internet, discussion groups, interviews, scanners, tracking tools).	BIT.MKT.4.A.a.2: Demonstrate appropriate communication when working with consumers when responding to inquiries.

Appendix A

Personal Financial Literacy Standards

The Wisconsin Standards for Personal Financial Literacy were approved by the Department of Public Instruction in May 2020. These standards were based on the 2017 Wisconsin Act 94 which requires school districts to adopt academic standards for financial literacy and incorporate instruction into the K-12 curriculum. There are six strands that were approved for these standards:

- Financial Mindset
- Education and Employment
- Money Management
- Saving and Investing
- Credit and Debt
- Risk Management and Insurance

The standards for Personal Financial Literacy are broken into grade bands of K-2 (e), 3-5 (i), 6-8 (m), and 9-12 (h), which is different from the other strands for Business and Information Technology. There are performance indicator boxes that were intentionally left blank where a developmentally appropriate topic is not available for that grade band level.

In December 2023, Wisconsin Act 60 was signed into law, requiring all students to take at least one-half of one credit of personal financial literacy for high school graduation. The act first applies to the 2028 graduating class.

The Personal Financial Literacy Standards are found on the Department of Public Instruction's [Personal Financial Literacy](#) page.

Appendix B

K-5 Elementary Standards



This section includes K-5 specific Standards for Business and Information Technology (BIT). The elementary standards for BIT can be covered by several different individuals within the elementary school setting. The content may be taught to elementary students by a licensed Business and Information Technology teacher, a licensed elementary teacher, or a team approach between the BIT and classroom teachers.

The BIT standards for elementary offer flexibility to be taught across disciplines and support the learning of the students in any classroom setting. Progression of learning is indicated by the B - Beginning, I - Intermediate, and A - Advanced mastery of the concepts by students as they learn in different disciplines or in specific BIT-related instruction.

These same indicators can be found in the IT Foundations strand of the BIT standards, allowing school districts the flexibility to meet the beginning, intermediate, and advanced learning needs of their students at any point in grades K-12. The mastery of this learning is vital for the success of students in academic, business, and personal life. Knowledge on different technology skills and tools will aid students in their future career search and attainment.

Standard: BIT.EL1

Students will use an appropriate digital tool to meet personal and education needs.

 Learning Priority	Performance Indicator	Grade Level					
		K	1	2	3	4	5
 BIT.EL1.a: Use various input technologies to enter and manipulate information appropriately.	BIT.EL1.a.1: Turn on a digital device and log in.	B	I	A	A	A	A
	BIT.EL1.a.2: Identify commonly use peripheral devices, such as monitor, keyboard, mouse, mobile devices, scanners, and cameras.	B	I	A	A	A	A
	BIT.EL1.a.3: Identify commonly used output devices, such as speakers, printer, and projector.	B	I	A	A	A	A
	BIT.EL1.a.4: Input data into various digital devices (e.g., Chromebook, laptop, tablet, and hand-held device).	B	I	A	A	A	A
	BIT.EL1.a.5: Demonstrate use of pointing device (touchpad or mouse) to click, scroll, and manipulate shapes and graphics.	B	I	A	A	A	A
	BIT.EL1.a.6: Demonstrate use of desktop icons, windows, and menus to open applications and documents.	B	I	A	A	A	A
	BIT.EL1.a.7: Demonstrate proper use of age-appropriate online tools and resources (i.e., assessments, web browsers).			B	I	A	A
	BIT.EL1.a.8: Demonstrate ability to save documents and manage files,			B	I	A	A

	Keyboarding: <ul style="list-style-type: none"> • Demonstrate the correct finger placement and reaches. • Demonstrate the touch method of keyboarding on an alphanumeric keyboard at acceptable speed and accuracy levels (recommended minimum: 5 wpm x grade level). • Demonstrate the touch method of keyboarding on a numeric keypad. • Demonstrate proper posture and ergonomics. 	B	B	I	A	A	A
BIT.EL1.b: Use word processing applications to organize and effectively communication information.	BIT.EL1.b.1: Demonstrate proper use of word processing application to write, edit, print, and save assignments.		B	I	A	A	A
	BIT.EL1.b.2: Apply reviewing features of word processing application to spell check, grammar check, dictionary, and thesaurus.			B	I	A	A
	BIT.EL1.b.3: Demonstrate ability to highlight, copy, and paste text.			B	I	A	A
	BIT.EL1.b.4: Customize documents using formatting, including alignment, spacing, themes, borders, and ordered and unordered lists.			B	I	A	A
	BIT.EL1.b.5: Demonstrate various methods of inputting and editing non-text data, such as pictures, videos, and music.		B	I	A	A	A
	BIT.EL1.b.6: Prepare documents in a timely fashion without errors.		B	I	A	A	A
	BIT.EL1.b.7: Identify the various proofreader marks and define their meaning.				B	I	A
BIT.EL1.c: Use spreadsheet applications to solve problems and effectively communicate information.	BIT.EL1.c.1: Identify and explain terms related to spreadsheets (i.e., cell, row, column, value, labels, etc.).				B	I	A
	BIT.EL1.c.2: Input and edit data into a spreadsheet.				B	I	A
	BIT.EL1.c.3: Illustrate data through graphs and charts.				B	I	A
	BIT.EL1.c.4: Calculate formulas to add, subtract, multiply, and divide data.				B	I	A

BIT.EL1.d: Use digital presentation applications to create and deliver a presentation.	BIT.EL1.d.1: Create, edit, and format text on a slide.		B	I	A	A	A
	BIT.EL1.d.2: Create a series of slides and organize them to present on a topic.			B	I	A	A
	BIT.EL1.d.3: Enhance a presentation visually using graphics, sounds, diagrams, animation, and transitions.				B	I	A
BIT.EL1.e: Use the Internet and common productivity applications to maximize communication, collaboration, and social interactions in a professional manner.	BIT.EL1.e.1: Use an email application to create an email message and respond to emails using reply, reply all, and forward appropriately.				B	I	A
	BIT.EL1.e.2: Add, manage, and delete email contacts.				B	I	A
	BIT.EL1.e.3: Use a calendar application to create a calendar and schedule calendar events.					B	I
	BIT.EL1.e.4: Manage speaker, microphone, and camera settings and participate in a video conference.				B	I	A
BIT.EL1.f: Use basic operating system features to manage applications, files, folders, and settings.	BIT.EL1.f.1: Create, move, copy, delete, and rename files and folders on desktop and cloud systems.			B	I	A	A
	BIT.EL1.f.2: Manage printing options including printing specific pages, multiple pages per sheet, paper size and orientation, and print to PDF.			B	I	A	A
BIT.EL1.g: Demonstrate respectful, responsible, inclusive, and ethical digital citizenship.	BIT.EL1.g.1: Identify and explore basic privacy issues associated with technology and explore the risks and dangers of sharing personal information in a digital world.	B	I	A	A	A	A
	BIT.EL1.g.2: Evaluate a digital source in terms of accuracy, relevance, bias, and comprehensiveness of the retrieved information.		B	I	A	A	A