

Main Criteria: Forward Education
Secondary Criteria: Wisconsin Academic Standards
Subjects: Mathematics, Science, Technology Education
Grades: 11, 12, Key Stage 4

Forward Education

Autonomous Electric Vehicles of the Future

**Wisconsin Academic Standards
 Mathematics
 Grade 11 - Adopted: 2021**

DOMAIN		Standards for Mathematical Practice
CONTENT STANDARD	Math Practice 1:	Make sense of problems and persevere in solving them.
CONTENT STANDARD	Math Practice 2:	Reason abstractly and quantitatively.
CONTENT STANDARD	Math Practice 3:	Construct viable arguments, and appreciate and critique the reasoning of others.
CONTENT STANDARD	Math Practice 4:	Model with mathematics.
CONTENT STANDARD	Math Practice 8:	Look for and express regularity in repeated reasoning.

DOMAIN		Algebra Content Standards
CONTENT STANDARD	M.A.CED .	Creating Equations (A-CED)
PERFORMANCE STANDARD / LEARNING PRIORITY	M.A.CED.A.	Create equations that describe numbers or relationships. (M)

DESCRIPTOR / FOCUS AREA M.A.CED.A.2. (F2Y) Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.

DOMAIN		Algebra Content Standards
CONTENT STANDARD	M.A.REI.	Reasoning with Equations and Inequalities (A-REI)
PERFORMANCE STANDARD / LEARNING PRIORITY	M.A.REI.A.	Understand solving equations as a process of reasoning and explain the reasoning.

DESCRIPTOR / FOCUS AREA M.A.REI.A.1. (F2Y) Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.

DOMAIN		Functions
CONTENT STANDARD	M.F.IF.	Interpreting Functions (F-IF)
PERFORMANCE STANDARD / LEARNING PRIORITY	M.F.IF.C.	Analyze functions using different representations. (M)
DESCRIPTOR / FOCUS AREA	M.F.IF.C. 7.	(F2Y) Graph functions expressed symbolically and show key features of the graph using an efficient method.

LEARNING CONTINUUM M.F.IF.C. 7.a. Graph linear and quadratic functions and show intercepts, maxima, and minima; and exponential functions, showing intercepts and end behavior.

DOMAIN		Functions
CONTENT STANDARD	M.F.LE.	Linear, Quadratic, and Exponential Models (F-LE)
PERFORMANCE STANDARD / LEARNING PRIORITY	M.F.LE.A.	Construct and compare linear, quadratic, and exponential models and solve problems. (M)
DESCRIPTOR / FOCUS AREA	M.F.LE.A. 1.	(F2Y) Distinguish between situations that can be modeled with linear functions and with exponential functions.

LEARNING CONTINUUM M.F.LE.A. 1.a. Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals.

DOMAIN		Geometry
CONTENT STANDARD	M.G.GP.E.	Expressing Geometric Properties (G-GPE)
PERFORMANCE STANDARD / LEARNING PRIORITY	M.G.GP.E.B.	Use coordinates to prove simple geometric theorems algebraically.

DESCRIPTOR / FOCUS AREA M.G.GPE. B.5. (F2Y) Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).

**Wisconsin Academic Standards
Mathematics**

Grade 12 - Adopted: 2021

DOMAIN		Standards for Mathematical Practice
CONTENT STANDARD	Math Practice 1:	Make sense of problems and persevere in solving them.
CONTENT STANDARD	Math Practice 2:	Reason abstractly and quantitatively.
CONTENT STANDARD	Math Practice 3:	Construct viable arguments, and appreciate and critique the reasoning of others.

CONTENT STANDARD	Math Practice 4:	Model with mathematics.
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CONTENT STANDARD	Math Practice 8:	Look for and express regularity in repeated reasoning.
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DOMAIN		Algebra Content Standards
CONTENT STANDARD	M.A.CED	Creating Equations (A-CED)
PERFORMANCE STANDARD / LEARNING PRIORITY	M.A.CED.A.	Create equations that describe numbers or relationships. (M)

DESCRIPTOR / FOCUS AREA M.A.CED.A.2. (F2Y) Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.

DOMAIN		Algebra Content Standards
CONTENT STANDARD	M.A.REI.	Reasoning with Equations and Inequalities (A-REI)
PERFORMANCE STANDARD / LEARNING PRIORITY	M.A.REI.A.	Understand solving equations as a process of reasoning and explain the reasoning.

DESCRIPTOR / FOCUS AREA M.A.REI.A.1. (F2Y) Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.

DOMAIN		Functions
CONTENT STANDARD	M.F.IF.	Interpreting Functions (F-IF)
PERFORMANCE STANDARD / LEARNING PRIORITY	M.F.IF.C.	Analyze functions using different representations. (M)

DESCRIPTOR / FOCUS AREA M.F.IF.C.7. (F2Y) Graph functions expressed symbolically and show key features of the graph using an efficient method.

LEARNING CONTINUUM M.F.IF.C.7.a. Graph linear and quadratic functions and show intercepts, maxima, and minima; and exponential functions, showing intercepts and end behavior.

DOMAIN		Functions
CONTENT STANDARD	M.F.LE.	Linear, Quadratic, and Exponential Models (F-LE)
PERFORMANCE STANDARD / LEARNING PRIORITY	M.F.LE.A.	Construct and compare linear, quadratic, and exponential models and solve problems. (M)

DESCRIPTOR / FOCUS AREA M.F.LE.A.1. (F2Y) Distinguish between situations that can be modeled with linear functions and with exponential functions.

LEARNING CONTINUUM	M.F.I.E.A. 1.a.	Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals.
DOMAIN		Geometry
CONTENT STANDARD	M.G.GP E.	Expressing Geometric Properties (G-GPE)
PERFORMANCE STANDARD / LEARNING PRIORITY	M.G.GP E.B.	Use coordinates to prove simple geometric theorems algebraically.

DESCRIPTOR / FOCUS AREA M.G.GPE. B.5. (F2Y) Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).

**Wisconsin Academic Standards
Science
Grade 11 - Adopted: 2017**

DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.CC.	Crosscutting Concepts (CC)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.CC4 .	Students use science and engineering practices, disciplinary core ideas, and an understanding of systems and models to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA		Systems and System Models

LEARNING CONTINUUM SCI.CC4. h. Students investigate or analyze a system by defining its boundaries and initial conditions, as well as its inputs and outputs. They use models (e.g., physical, mathematical, computer models) to simulate the flow of energy, matter, and interactions within and between systems at different scales. They also use models and simulations to predict the behavior of a system, and recognize that these predictions have limited precision and reliability due to the assumptions and approximations inherent in the models. They also design systems to do specific tasks.

DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.SEP.	Science and Engineering Practices (SEP)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.SEP 2.	Students develop and use models, in conjunction with using crosscutting concepts and disciplinary core ideas, to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.SEP 2.A.	Developing Models – Students use, synthesize, and develop models to predict and show relationships among variables and between systems and their components in the natural and designed world. This includes the following:

LEARNING CONTINUUM SCI.SEP2 .A.h.1. Evaluate merits and limitations of two different models of the same proposed tool, process, mechanism, or system in order to select or revise a model that best fits the evidence or design criteria.

LEARNING CONTINUUM SCI.SEP2 .A.h.2. Design a test of a model to ascertain its reliability.

LEARNING CONTINUUM SCI.SEP2 .A.h.3. Develop, revise, and use models based on evidence to illustrate and predict the relationships between systems or between components of a system.

LEARNING CONTINUUM SCI.SEP2 .A.h.4. Develop and use multiple types of models to provide mechanistic accounts and predict phenomena. Move flexibly between these model types based on merits and limitations.

LEARNING CONTINUUM	SCI.SEP2 .A.h.5.	Develop a complex model that allows for manipulation and testing of a proposed process or system.
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LEARNING CONTINUUM	SCI.SEP2 .A.h.6.	Develop and use a model (including mathematical and computational) to generate data to support explanations, predict phenomena, analyze systems, and solve problems.
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DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.SEP.	Science and Engineering Practices (SEP)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.SEP 3.	Students plan and carry out investigations, in conjunction with using crosscutting concepts and disciplinary core ideas, to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.SEP 3.A.	Planning and Conducting Investigations – Students plan and carry out investigations that provide evidence for and test conceptual, mathematical, physical, and empirical models: This includes the following:

LEARNING CONTINUUM	SCI.SEP3 .A.h.4.	Select appropriate tools to collect, record, analyze, and evaluate data.
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LEARNING CONTINUUM	SCI.SEP3 .A.h.6.	Manipulate variables and collect data about a complex model of a proposed process or system to identify failure points, or to improve performance relative to criteria for success.
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DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.SEP.	Science and Engineering Practices (SEP)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.SEP 5.	Students use mathematics and computational thinking, in conjunction with using crosscutting concepts and disciplinary core ideas, to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.SEP 5.A.	Qualitative and Quantitative Data – Students use algebraic thinking and analysis, a range of linear and nonlinear functions (including trigonometric functions, exponentials, and logarithms), and computational tools for statistical analysis to analyze, represent, and model data. Simple computational simulations are created and used based on mathematical models of basic assumptions. This includes the following:

LEARNING CONTINUUM	SCI.SEP 5.A.h.2.	Create and/or revise a computational model or simulation of a phenomenon, designed device, process, or system.
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LEARNING CONTINUUM	SCI.SEP 5.A.h.3.	Use mathematical, computational, and algorithmic representations of phenomena or design solutions to describe and support claims and explanations.
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LEARNING CONTINUUM	SCI.SEP 5.A.h.5.	Use simple limit cases to test mathematical expressions, computer programs, algorithms, or simulations of a process or system to see if a model “makes sense” by comparing the outcomes with what is known about the real world.
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DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.SEP.	Science and Engineering Practices (SEP)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.SEP 6.	Students construct explanations and design solutions, in conjunction with using crosscutting concepts and disciplinary core ideas, to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.SEP 6.A.	Construct an Explanation – Students create explanations that are supported by multiple and independent student-generated sources of evidence consistent with scientific ideas, principles, and theories. This includes the following:

LEARNING CONTINUUM	SCI.SEP 6.A.h.1.	Make quantitative and qualitative claims regarding the relationship between dependent and independent variables.
LEARNING CONTINUUM	SCI.SEP 6.A.h.2.	Construct and revise an explanation based on valid and reliable evidence obtained from a variety of sources, including students' own investigations, models, theories, simulations, and peer review. Explanations should reflect the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future.
LEARNING CONTINUUM	SCI.SEP 6.A.h.3.	Apply scientific ideas, principles, and evidence to provide an explanation of phenomena taking into account possible, unanticipated effects.
LEARNING CONTINUUM	SCI.SEP 6.A.h.4.	Apply scientific reasoning, theory, and models to link evidence to the claim and to assess the extent to which the reasoning and data support the explanation.

DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.SEP.	Science and Engineering Practices (SEP)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.SEP 6.	Students construct explanations and design solutions, in conjunction with using crosscutting concepts and disciplinary core ideas, to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.SEP 6.B.	Design Solutions – Students create designs that are supported by multiple and independent student-generated sources of evidence consistent with scientific ideas, principles, and theories. This includes the following:

LEARNING CONTINUUM	SCI.SEP 6.B.h.1.	Design, evaluate, and refine a solution to a complex real-world problem, based on scientific knowledge, student-generated sources of evidence, and prioritized criteria. Consider trade-offs.
LEARNING CONTINUUM	SCI.SEP 6.B.h.2.	Apply scientific ideas, principles, and evidence to solve design problems, taking into account possible unanticipated effects.

DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.SEP.	Science and Engineering Practices (SEP)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.SEP 8.	Students will obtain, evaluate and communicate information, in conjunction with using crosscutting concepts and disciplinary core ideas, to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.SEP 8.A.	Obtain, Evaluate, and Communicate Information – Students evaluate the validity and reliability of claims, methods, and designs. This includes the following:

LEARNING CONTINUUM	SCI.SEP 8.A.h.1.	Critically read scientific literature adapted for classroom use to determine the central ideas or conclusions, and to obtain scientific and technical information. Summarize complex evidence, concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
LEARNING CONTINUUM	SCI.SEP 8.A.h.5.	Communicate scientific and technical information in multiple formats, including orally, graphically, textually, and mathematically. Examples of information could include ideas about phenomena or the design and performance of a proposed process or system.

DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.PS.	Disciplinary Core Idea: Physical Science (PS)

PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.PS1	Students use science and engineering practices, crosscutting concepts, and an understanding of matter and its interactions to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.PS1.B.	Chemical Reactions
LEARNING CONTINUUM	SCI.PS1.B.h.	Chemical processes are understood in terms of collisions of molecules, rearrangement of atoms, and changes in energy as determined by properties of elements involved.
DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.ESS.	Disciplinary Core Idea: Earth and Space Sciences (ESS)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.ESS 2.	Students use science and engineering practices, crosscutting concepts, and an understanding of Earth's systems to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.ESS 2.D.	Weather and Climate
LEARNING CONTINUUM	SCI.ESS2.D.h.	The role of radiation from the sun and its interactions with the atmosphere, ocean, and land are the foundation for the global climate system. Global climate models are used to predict future changes, including changes influenced by human behavior and natural factors.
DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.ESS.	Disciplinary Core Idea: Earth and Space Sciences (ESS)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.ESS 3.	Students use science and engineering practices, crosscutting concepts, and an understanding of the Earth and human activity to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.ESS 3.C.	Human Impacts on Earth Systems
LEARNING CONTINUUM	SCI.ESS3.C.h.	Sustainability of human societies and the biodiversity that supports them requires responsible management of natural resources, including the development of technologies.
DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.ETS	Disciplinary Core Idea: Engineering, Technology, and the Application of Science (ETS)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.ETS 1.	Students use science and engineering practices, crosscutting concepts, and an understanding of engineering design to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.ETS 1.B.	Developing Possible Solutions
LEARNING CONTINUUM	SCI.ETS1.B.h.1.	When evaluating solutions, it is important to take into account a range of constraints, including cost, safety, reliability, and aesthetics, and to consider social, cultural, and environmental impacts.
LEARNING CONTINUUM	SCI.ETS1.B.h.2.	Both physical models and computers can be used in various ways to aid in the engineering design process. Computers are useful for a variety of purposes, such as running simulations to test different ways of solving a problem or to see which one is most efficient or economical. They are also useful in making a persuasive presentation to a client about how a given design will meet his or her needs.
DOMAIN	WI.SCI.	Science

CONTENT STANDARD	SCI.ETS	Disciplinary Core Idea: Engineering, Technology, and the Application of Science (ETS)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.ETS 2.	Students use science and engineering practices, crosscutting concepts, and an understanding of the links among Engineering, Technology, Science, and Society to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.ETS 2.A.	Interdependence of Science, Engineering, and Technology
LEARNING CONTINUUM	SCI.ETS2 .A.h.1.	Science and engineering complement each other in the cycle known as research and development (R&D).
LEARNING CONTINUUM	SCI.ETS2 .A.h.2.	Many research and development projects may involve scientists, engineers, and others with wide ranges of expertise.
DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.ETS	Disciplinary Core Idea: Engineering, Technology, and the Application of Science (ETS)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.ETS 2.	Students use science and engineering practices, crosscutting concepts, and an understanding of the links among Engineering, Technology, Science, and Society to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.ETS 2.B.	Influence of Engineering, Technology, and Science on Society and the Natural World
LEARNING CONTINUUM	SCI.ETS2 .B.h.1.	Modern civilization depends on major technological systems, such as agriculture, health, water, energy, transportation, manufacturing, construction, and communications.
LEARNING CONTINUUM	SCI.ETS2 .B.h.2.	Engineers continuously modify these systems to increase benefits while decreasing costs and risks.
LEARNING CONTINUUM	SCI.ETS2 .B.h.3.	New technologies can have deep impacts on society and the environment, including some that were not anticipated.
LEARNING CONTINUUM	SCI.ETS2 .B.h.4.	Analysis of costs and benefits is a critical aspect of decisions about technology.
DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.ETS	Disciplinary Core Idea: Engineering, Technology, and the Application of Science (ETS)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.ETS 3.	Students use science and engineering practices, crosscutting concepts, and an understanding of the nature of science and engineering to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.ETS 3.A.	Science and Engineering Are Human Endeavors
LEARNING CONTINUUM	SCI.ETS3 .A.h.4.	Scientists and engineers embrace skepticism and critique as a community. Deliberate deceit in science is rare and is likely exposed through the peer review process. When discovered, intellectual dishonesty is condemned by the scientific community.
DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.ETS	Disciplinary Core Idea: Engineering, Technology, and the Application of Science (ETS)

PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.ETS 3.	Students use science and engineering practices, crosscutting concepts, and an understanding of the nature of science and engineering to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.ETS 3.C.	Science and Engineering Use Multiple Approaches to Create New Knowledge and Solve Problems

LEARNING CONTINUUM SCI.ETS3 .C.h.3. Engineers use a variety of approaches, tools, and techniques to define problems and develop solutions to those problems. Successful engineering solutions meet stakeholder needs and safety requirements, and are economically viable. Trade-offs in design aspects balance competing demands.

**Wisconsin Academic Standards
Science
Grade 12 - Adopted: 2017**

DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.CC.	Crosscutting Concepts (CC)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.CC4 .	Students use science and engineering practices, disciplinary core ideas, and an understanding of systems and models to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA		Systems and System Models

LEARNING CONTINUUM SCI.CC4 .h. Students investigate or analyze a system by defining its boundaries and initial conditions, as well as its inputs and outputs. They use models (e.g., physical, mathematical, computer models) to simulate the flow of energy, matter, and interactions within and between systems at different scales. They also use models and simulations to predict the behavior of a system, and recognize that these predictions have limited precision and reliability due to the assumptions and approximations inherent in the models. They also design systems to do specific tasks.

DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.SEP.	Science and Engineering Practices (SEP)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.SEP 2.	Students develop and use models, in conjunction with using crosscutting concepts and disciplinary core ideas, to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.SEP 2.A.	Developing Models – Students use, synthesize, and develop models to predict and show relationships among variables and between systems and their components in the natural and designed world. This includes the following:

LEARNING CONTINUUM SCI.SEP2 .A.h.1. Evaluate merits and limitations of two different models of the same proposed tool, process, mechanism, or system in order to select or revise a model that best fits the evidence or design criteria.

LEARNING CONTINUUM SCI.SEP2 .A.h.2. Design a test of a model to ascertain its reliability.

LEARNING CONTINUUM SCI.SEP2 .A.h.3. Develop, revise, and use models based on evidence to illustrate and predict the relationships between systems or between components of a system.

LEARNING CONTINUUM SCI.SEP2 .A.h.4. Develop and use multiple types of models to provide mechanistic accounts and predict phenomena. Move flexibly between these model types based on merits and limitations.

LEARNING CONTINUUM SCI.SEP2 .A.h.5. Develop a complex model that allows for manipulation and testing of a proposed process or system.

LEARNING CONTINUUM	SCI.SEP2 .A.h.6.	Develop and use a model (including mathematical and computational) to generate data to support explanations, predict phenomena, analyze systems, and solve problems.
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DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.SEP.	Science and Engineering Practices (SEP)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.SEP 3.	Students plan and carry out investigations, in conjunction with using crosscutting concepts and disciplinary core ideas, to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.SEP 3.A.	Planning and Conducting Investigations – Students plan and carry out investigations that provide evidence for and test conceptual, mathematical, physical, and empirical models: This includes the following:

LEARNING CONTINUUM	SCI.SEP3 .A.h.4.	Select appropriate tools to collect, record, analyze, and evaluate data.
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LEARNING CONTINUUM	SCI.SEP3 .A.h.6.	Manipulate variables and collect data about a complex model of a proposed process or system to identify failure points, or to improve performance relative to criteria for success.
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DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.SEP.	Science and Engineering Practices (SEP)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.SEP 5.	Students use mathematics and computational thinking, in conjunction with using crosscutting concepts and disciplinary core ideas, to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.SEP 5.A.	Qualitative and Quantitative Data – Students use algebraic thinking and analysis, a range of linear and nonlinear functions (including trigonometric functions, exponentials, and logarithms), and computational tools for statistical analysis to analyze, represent, and model data. Simple computational simulations are created and used based on mathematical models of basic assumptions. This includes the following:

LEARNING CONTINUUM	SCI.SEP 5.A.h.2.	Create and/or revise a computational model or simulation of a phenomenon, designed device, process, or system.
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LEARNING CONTINUUM	SCI.SEP 5.A.h.3.	Use mathematical, computational, and algorithmic representations of phenomena or design solutions to describe and support claims and explanations.
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LEARNING CONTINUUM	SCI.SEP 5.A.h.5.	Use simple limit cases to test mathematical expressions, computer programs, algorithms, or simulations of a process or system to see if a model “makes sense” by comparing the outcomes with what is known about the real world.
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DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.SEP.	Science and Engineering Practices (SEP)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.SEP 6.	Students construct explanations and design solutions, in conjunction with using crosscutting concepts and disciplinary core ideas, to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.SEP 6.A.	Construct an Explanation – Students create explanations that are supported by multiple and independent student-generated sources of evidence consistent with scientific ideas, principles, and theories. This includes the following:

LEARNING CONTINUUM	SCI.SEP 6.A.h.1.	Make quantitative and qualitative claims regarding the relationship between dependent and independent variables.
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LEARNING CONTINUUM	SCI.SEP 6.A.h.2.	Construct and revise an explanation based on valid and reliable evidence obtained from a variety of sources, including students' own investigations, models, theories, simulations, and peer review. Explanations should reflect the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future.
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LEARNING CONTINUUM	SCI.SEP 6.A.h.3.	Apply scientific ideas, principles, and evidence to provide an explanation of phenomena taking into account possible, unanticipated effects.
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LEARNING CONTINUUM	SCI.SEP 6.A.h.4.	Apply scientific reasoning, theory, and models to link evidence to the claim and to assess the extent to which the reasoning and data support the explanation.
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DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.SEP.	Science and Engineering Practices (SEP)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.SEP 6.	Students construct explanations and design solutions, in conjunction with using crosscutting concepts and disciplinary core ideas, to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.SEP 6.B.	Design Solutions – Students create designs that are supported by multiple and independent student-generated sources of evidence consistent with scientific ideas, principles, and theories. This includes the following:

LEARNING CONTINUUM	SCI.SEP 6.B.h.1.	Design, evaluate, and refine a solution to a complex real-world problem, based on scientific knowledge, student-generated sources of evidence, and prioritized criteria. Consider trade-offs.
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LEARNING CONTINUUM	SCI.SEP 6.B.h.2.	Apply scientific ideas, principles, and evidence to solve design problems, taking into account possible unanticipated effects.
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DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.SEP.	Science and Engineering Practices (SEP)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.SEP 8.	Students will obtain, evaluate and communicate information, in conjunction with using crosscutting concepts and disciplinary core ideas, to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.SEP 8.A.	Obtain, Evaluate, and Communicate Information – Students evaluate the validity and reliability of claims, methods, and designs. This includes the following:

LEARNING CONTINUUM	SCI.SEP 8.A.h.1.	Critically read scientific literature adapted for classroom use to determine the central ideas or conclusions, and to obtain scientific and technical information. Summarize complex evidence, concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
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LEARNING CONTINUUM	SCI.SEP 8.A.h.5.	Communicate scientific and technical information in multiple formats, including orally, graphically, textually, and mathematically. Examples of information could include ideas about phenomena or the design and performance of a proposed process or system.
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DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.PS.	Disciplinary Core Idea: Physical Science (PS)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.PS1 .	Students use science and engineering practices, crosscutting concepts, and an understanding of matter and its interactions to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.PS1. B.	Chemical Reactions

LEARNING CONTINUUM	SCI.PS1.B.h.	Chemical processes are understood in terms of collisions of molecules, rearrangement of atoms, and changes in energy as determined by properties of elements involved.
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DOMAIN	W.SCI.	Science
CONTENT STANDARD	SCI.ESS.	Disciplinary Core Idea: Earth and Space Sciences (ESS)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.ESS 2.	Students use science and engineering practices, crosscutting concepts, and an understanding of Earth's systems to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.ESS 2.D.	Weather and Climate

LEARNING CONTINUUM	SCI.ESS2.D.h.	The role of radiation from the sun and its interactions with the atmosphere, ocean, and land are the foundation for the global climate system. Global climate models are used to predict future changes, including changes influenced by human behavior and natural factors.
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DOMAIN	W.SCI.	Science
CONTENT STANDARD	SCI.ESS.	Disciplinary Core Idea: Earth and Space Sciences (ESS)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.ESS 3.	Students use science and engineering practices, crosscutting concepts, and an understanding of the Earth and human activity to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.ESS 3.C.	Human Impacts on Earth Systems

LEARNING CONTINUUM	SCI.ESS3.C.h.	Sustainability of human societies and the biodiversity that supports them requires responsible management of natural resources, including the development of technologies.
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DOMAIN	W.SCI.	Science
CONTENT STANDARD	SCI.ETS .	Disciplinary Core Idea: Engineering, Technology, and the Application of Science (ETS)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.ETS 1.	Students use science and engineering practices, crosscutting concepts, and an understanding of engineering design to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.ETS 1.B.	Developing Possible Solutions

LEARNING CONTINUUM	SCI.ETS1.B.h.1.	When evaluating solutions, it is important to take into account a range of constraints, including cost, safety, reliability, and aesthetics, and to consider social, cultural, and environmental impacts.
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LEARNING CONTINUUM	SCI.ETS1.B.h.2.	Both physical models and computers can be used in various ways to aid in the engineering design process. Computers are useful for a variety of purposes, such as running simulations to test different ways of solving a problem or to see which one is most efficient or economical. They are also useful in making a persuasive presentation to a client about how a given design will meet his or her needs.
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DOMAIN	W.SCI.	Science
CONTENT STANDARD	SCI.ETS .	Disciplinary Core Idea: Engineering, Technology, and the Application of Science (ETS)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.ETS 2.	Students use science and engineering practices, crosscutting concepts, and an understanding of the links among Engineering, Technology, Science, and Society to make sense of phenomena and solve problems.

DESCRIPTOR / FOCUS AREA	SCI.ETS 2.A.	Interdependence of Science, Engineering, and Technology
LEARNING CONTINUUM	SCI.ETS2 .A.h.1.	Science and engineering complement each other in the cycle known as research and development (R&D).
LEARNING CONTINUUM	SCI.ETS2 .A.h.2.	Many research and development projects may involve scientists, engineers, and others with wide ranges of expertise.
DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.ETS .	Disciplinary Core Idea: Engineering, Technology, and the Application of Science (ETS)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.ETS 2.	Students use science and engineering practices, crosscutting concepts, and an understanding of the links among Engineering, Technology, Science, and Society to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.ETS 2.B.	Influence of Engineering, Technology, and Science on Society and the Natural World
LEARNING CONTINUUM	SCI.ETS2 .B.h.1.	Modern civilization depends on major technological systems, such as agriculture, health, water, energy, transportation, manufacturing, construction, and communications.
LEARNING CONTINUUM	SCI.ETS2 .B.h.2.	Engineers continuously modify these systems to increase benefits while decreasing costs and risks.
LEARNING CONTINUUM	SCI.ETS2 .B.h.3.	New technologies can have deep impacts on society and the environment, including some that were not anticipated.
LEARNING CONTINUUM	SCI.ETS2 .B.h.4.	Analysis of costs and benefits is a critical aspect of decisions about technology.
DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.ETS .	Disciplinary Core Idea: Engineering, Technology, and the Application of Science (ETS)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.ETS 3.	Students use science and engineering practices, crosscutting concepts, and an understanding of the nature of science and engineering to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.ETS 3.A.	Science and Engineering Are Human Endeavors
LEARNING CONTINUUM	SCI.ETS3 .A.h.4.	Scientists and engineers embrace skepticism and critique as a community. Deliberate deceit in science is rare and is likely exposed through the peer review process. When discovered, intellectual dishonesty is condemned by the scientific community.
DOMAIN	WI.SCI.	Science
CONTENT STANDARD	SCI.ETS .	Disciplinary Core Idea: Engineering, Technology, and the Application of Science (ETS)
PERFORMANCE STANDARD / LEARNING PRIORITY	SCI.ETS 3.	Students use science and engineering practices, crosscutting concepts, and an understanding of the nature of science and engineering to make sense of phenomena and solve problems.
DESCRIPTOR / FOCUS AREA	SCI.ETS 3.C.	Science and Engineering Use Multiple Approaches to Create New Knowledge and Solve Problems

LEARNING CONTINUUM	SCI.ETS3 .C.h.3.	Engineers use a variety of approaches, tools, and techniques to define problems and develop solutions to those problems. Successful engineering solutions meet stakeholder needs and safety requirements, and are economically viable. Trade-offs in design aspects balance competing demands.
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**Wisconsin Academic Standards
Technology Education
Grade 11 - Adopted: 2017**

DOMAIN	WI.CS.	Computer Science
CONTENT STANDARD	CS.AP.	Content Area: Algorithms and Programming (AP)
PERFORMANCE STANDARD / LEARNING PRIORITY	CS.AP1.	Students will recognize and define computational problems using algorithms and programming.
DESCRIPTOR / FOCUS AREA	CS.AP1.a.	Develop algorithms.

LEARNING CONTINUUM	CS.AP1.a .8.h.	Analyze a problem, and then design and implement an algorithmic solution using sequence, selection and iteration.
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DOMAIN	WI.CS.	Computer Science
CONTENT STANDARD	CS.AP.	Content Area: Algorithms and Programming (AP)
PERFORMANCE STANDARD / LEARNING PRIORITY	CS.AP2.	Students will create computational artifacts using algorithms and programming.
DESCRIPTOR / FOCUS AREA	CS.AP2.a.	Develop and implement an artifact.

LEARNING CONTINUUM	CS.AP2.a .11.h.	Integrate grade-level appropriate mathematical techniques, concepts, and processes in the creation of computational artifacts.
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DOMAIN	WI.CS.	Computer Science
CONTENT STANDARD	CS.AP.	Content Area: Algorithms and Programming (AP)
PERFORMANCE STANDARD / LEARNING PRIORITY	CS.AP3.	Students will communicate about computing ideas.
DESCRIPTOR / FOCUS AREA	CS.AP3.b.	Communicate about technical and social issues.

LEARNING CONTINUUM	CS.AP3.b .9.h.	(+) Compare a variety of programming languages and identify features that make them useful for solving different types of problems and developing different kinds of systems (e.g., declarative, logic, parallel, functional, compiled, interpreted, real-time).
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DOMAIN	WI.CS.	Computer Science
CONTENT STANDARD	CS.AP.	Content Area: Algorithms and Programming (AP)
PERFORMANCE STANDARD / LEARNING PRIORITY	CS.AP4.	Students will develop and use abstractions.

DESCRIPTOR / FOCUS AREA	CS.AP4. a.	Create and use abstractions (representations) to solve complex computational problems.
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LEARNING CONTINUUM	CS.AP4. a.8.h.	(+) Critically analyze and evaluate classic algorithms (e.g., sorting, searching) and use in different contexts, adapting as appropriate.
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DOMAIN	WI.ITL.	Information and Technology Literacy
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CONTENT STANDARD	ITL.KC.	Content Area: Knowledge Constructor (KC)
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PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.KC1 .	Students critically curate a variety of digital tools and diverse resources.
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DESCRIPTOR / FOCUS AREA	ITL.KC1. a.	Plan and employ effective research strategies.
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LEARNING CONTINUUM	ITL.KC1.a .12.h.	Utilize an inquiry-based process to deepen content knowledge, connect academic learning with the real world, pursue personal interests, and investigate opportunities for personal growth.
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DOMAIN	WI.ITL.	Information and Technology Literacy
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CONTENT STANDARD	ITL.KC.	Content Area: Knowledge Constructor (KC)
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PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.KC1 .	Students critically curate a variety of digital tools and diverse resources.
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DESCRIPTOR / FOCUS AREA	ITL.KC1. b.	Evaluate the accuracy, perspective, credibility, and relevance of information, media, data or other resources.
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LEARNING CONTINUUM	ITL.KC1.b .8.h.	Select information that is related to a problem or question while using formats and genre most appropriate to the content. Establish criteria in judging the information in this process.
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DOMAIN	WI.ITL.	Information and Technology Literacy
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CONTENT STANDARD	ITL.KC.	Content Area: Knowledge Constructor (KC)
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PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.KC2 .	Students produce creative artifacts and make meaningful learning experiences from curated knowledge for themselves and others.
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DESCRIPTOR / FOCUS AREA	ITL.KC2. b.	Build knowledge by actively exploring real-world issues and problems.
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LEARNING CONTINUUM	ITL.KC2.b .8.h.	Build knowledge by actively exploring real-world issues and problems, independently developing ideas and theories and pursuing answers and solutions.
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DOMAIN	WI.ITL.	Information and Technology Literacy
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CONTENT STANDARD	ITL.ID.	Content Area: Innovative Designer (ID)
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PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.ID1.	Students use a variety of digital tools and resources to identify and solve authentic problems using design thinking.
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DESCRIPTOR / FOCUS AREA	ITL.ID1. b.	Exhibit tolerance for ambiguity, perseverance and the capacity to work with authentic, open-ended problems.
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LEARNING CONTINUUM	ITL.ID1.b. 4.h.	Apply abstract concepts to solve authentic, open-ended problems for a group of stakeholders.
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DOMAIN	WI.ITL.	Information and Technology Literacy
CONTENT STANDARD	ITL.ID.	Content Area: Innovative Designer (ID)
PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.ID2.	Students use a variety of technologies within a design process to create new, useful, and imaginative solutions.
DESCRIPTOR / FOCUS AREA	ITL.ID2.b.	Select and use digital resources to plan and manage a design process that considers design constraints and calculated risks.

LEARNING CONTINUUM	ITL.ID2.b. 4.h.	Select and use digital resources to plan and manage a design process that considers design constraints and calculated risks as they apply to authentic problems.
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DOMAIN	WI.ITL.	Information and Technology Literacy
CONTENT STANDARD	ITL.CT.	Content Area: Computational Thinker (CT)
PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.CT1.	Students develop and employ strategies for understanding and solving problems.
DESCRIPTOR / FOCUS AREA	ITL.CT1.a.	Identify, define, and interpret problems where digital tools can assist in finding solutions.

LEARNING CONTINUUM	ITL.CT1.a. 4.h.	Create and articulate a precise and thorough description of a problem designed to utilize digital tools, data analysis, abstract modeling, or algorithmic thinking to facilitate a solution.
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DOMAIN	WI.ITL.	Information and Technology Literacy
CONTENT STANDARD	ITL.CT.	Content Area: Computational Thinker (CT)
PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.CT1.	Students develop and employ strategies for understanding and solving problems.
DESCRIPTOR / FOCUS AREA	ITL.CT1.c.	Break problems into smaller parts, identify key information, and develop descriptive models.

LEARNING CONTINUUM	ITL.CT1.c. 4.h.	Evaluate the problem solving process and algorithms of others, and synthesize this information to create the most effective and efficient way to solve an authentic problem.
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DOMAIN	WI.ITL.	Information and Technology Literacy
CONTENT STANDARD	ITL.GC.	Content Area: Global Collaborator (GC)
PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.GC2.	Students use digital tools to connect with a global network of learners and engage with issues that impact local and global communities.
DESCRIPTOR / FOCUS AREA	ITL.GC2.b.	Explore local and global issues and use collaborative digital resources to investigate and develop solutions.

LEARNING CONTINUUM	ITL.GC2.b. 4.h.	Explore and analyze local and global issues and leverage collaborative digital tools to work with others to investigate, develop, and actualize solutions.
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Wisconsin Academic Standards

Technology Education

Grade 12 - Adopted: 2017

DOMAIN	WI.CS.	Computer Science
CONTENT STANDARD	CS.AP.	Content Area: Algorithms and Programming (AP)
PERFORMANCE STANDARD / LEARNING PRIORITY	CS.AP1.	Students will recognize and define computational problems using algorithms and programming.
DESCRIPTOR / FOCUS AREA	CS.AP1.a.	Develop algorithms.

LEARNING CONTINUUM CS.AP1.a .8.h Analyze a problem, and then design and implement an algorithmic solution using sequence, selection and iteration.

DOMAIN	WI.CS.	Computer Science
CONTENT STANDARD	CS.AP.	Content Area: Algorithms and Programming (AP)
PERFORMANCE STANDARD / LEARNING PRIORITY	CS.AP2.	Students will create computational artifacts using algorithms and programming.
DESCRIPTOR / FOCUS AREA	CS.AP2.a.	Develop and implement an artifact.

LEARNING CONTINUUM CS.AP2.a .11.h Integrate grade-level appropriate mathematical techniques, concepts, and processes in the creation of computational artifacts.

DOMAIN	WI.CS.	Computer Science
CONTENT STANDARD	CS.AP.	Content Area: Algorithms and Programming (AP)
PERFORMANCE STANDARD / LEARNING PRIORITY	CS.AP3.	Students will communicate about computing ideas.
DESCRIPTOR / FOCUS AREA	CS.AP3.b.	Communicate about technical and social issues.

LEARNING CONTINUUM CS.AP3.b .9.h (+) Compare a variety of programming languages and identify features that make them useful for solving different types of problems and developing different kinds of systems (e.g., declarative, logic, parallel, functional, compiled, interpreted, real-time).

DOMAIN	WI.CS.	Computer Science
CONTENT STANDARD	CS.AP.	Content Area: Algorithms and Programming (AP)
PERFORMANCE STANDARD / LEARNING PRIORITY	CS.AP4.	Students will develop and use abstractions.
DESCRIPTOR / FOCUS AREA	CS.AP4.a.	Create and use abstractions (representations) to solve complex computational problems.

LEARNING CONTINUUM CS.AP4.a.8.h (+) Critically analyze and evaluate classic algorithms (e.g., sorting, searching) and use in different contexts, adapting as appropriate.

DOMAIN	WI.ITL.	Information and Technology Literacy
CONTENT STANDARD	ITL.KC.	Content Area: Knowledge Constructor (KC)
PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.KC1.	Students critically curate a variety of digital tools and diverse resources.
DESCRIPTOR / FOCUS AREA	ITL.KC1.a.	Plan and employ effective research strategies.

LEARNING CONTINUUM ITL.KC1.a .12.h. Utilize an inquiry-based process to deepen content knowledge, connect academic learning with the real world, pursue personal interests, and investigate opportunities for personal growth.

DOMAIN	WI.ITL.	Information and Technology Literacy
CONTENT STANDARD	ITL.KC.	Content Area: Knowledge Constructor (KC)
PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.KC1.	Students critically curate a variety of digital tools and diverse resources.
DESCRIPTOR / FOCUS AREA	ITL.KC1.b.	Evaluate the accuracy, perspective, credibility, and relevance of information, media, data or other resources.

LEARNING CONTINUUM ITL.KC1.b .8.h. Select information that is related to a problem or question while using formats and genre most appropriate to the content. Establish criteria in judging the information in this process.

DOMAIN	WI.ITL.	Information and Technology Literacy
CONTENT STANDARD	ITL.KC.	Content Area: Knowledge Constructor (KC)
PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.KC2.	Students produce creative artifacts and make meaningful learning experiences from curated knowledge for themselves and others.
DESCRIPTOR / FOCUS AREA	ITL.KC2.b.	Build knowledge by actively exploring real-world issues and problems.

LEARNING CONTINUUM ITL.KC2.b .8.h. Build knowledge by actively exploring real-world issues and problems, independently developing ideas and theories and pursuing answers and solutions.

DOMAIN	WI.ITL.	Information and Technology Literacy
CONTENT STANDARD	ITL.ID.	Content Area: Innovative Designer (ID)
PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.ID1.	Students use a variety of digital tools and resources to identify and solve authentic problems using design thinking.
DESCRIPTOR / FOCUS AREA	ITL.ID1.b.	Exhibit tolerance for ambiguity, perseverance and the capacity to work with authentic, open-ended problems.

LEARNING CONTINUUM ITL.ID1.b .4.h. Apply abstract concepts to solve authentic, open-ended problems for a group of stakeholders.

DOMAIN	WI.ITL.	Information and Technology Literacy
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CONTENT STANDARD	ITL.ID.	Content Area: Innovative Designer (ID)
PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.ID2.	Students use a variety of technologies within a design process to create new, useful, and imaginative solutions.

DESCRIPTOR / FOCUS AREA	ITL.ID2.b.	Select and use digital resources to plan and manage a design process that considers design constraints and calculated risks.
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LEARNING CONTINUUM	ITL.ID2.b.4.h.	Select and use digital resources to plan and manage a design process that considers design constraints and calculated risks as they apply to authentic problems.
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DOMAIN	WI.ITL.	Information and Technology Literacy
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CONTENT STANDARD	ITL.CT.	Content Area: Computational Thinker (CT)
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PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.CT1.	Students develop and employ strategies for understanding and solving problems.
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DESCRIPTOR / FOCUS AREA	ITL.CT1.a.	Identify, define, and interpret problems where digital tools can assist in finding solutions.
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LEARNING CONTINUUM	ITL.CT1.a.4.h.	Create and articulate a precise and thorough description of a problem designed to utilize digital tools, data analysis, abstract modeling, or algorithmic thinking to facilitate a solution.
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DOMAIN	WI.ITL.	Information and Technology Literacy
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CONTENT STANDARD	ITL.CT.	Content Area: Computational Thinker (CT)
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PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.CT1.	Students develop and employ strategies for understanding and solving problems.
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DESCRIPTOR / FOCUS AREA	ITL.CT1.c.	Break problems into smaller parts, identify key information, and develop descriptive models.
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LEARNING CONTINUUM	ITL.CT1.c.4.h.	Evaluate the problem solving process and algorithms of others, and synthesize this information to create the most effective and efficient way to solve an authentic problem.
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DOMAIN	WI.ITL.	Information and Technology Literacy
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CONTENT STANDARD	ITL.GC.	Content Area: Global Collaborator (GC)
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PERFORMANCE STANDARD / LEARNING PRIORITY	ITL.GC2.	Students use digital tools to connect with a global network of learners and engage with issues that impact local and global communities.
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DESCRIPTOR / FOCUS AREA	ITL.GC2.b.	Explore local and global issues and use collaborative digital resources to investigate and develop solutions.
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LEARNING CONTINUUM	ITL.GC2.b.4.h.	Explore and analyze local and global issues and leverage collaborative digital tools to work with others to investigate, develop, and actualize solutions.
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