

# Electronic Music I Curriculum



## Table of Contents

CTECS - Vision of Graduate	2
CTECS Instructional Model	4
Curriculum Introduction	5
Curriculum Components	5
Music Philosophy	7
Music/Electronic Music I - Course Map	8
Music/Electronic Music I Unit 1 - The Birth of Electronic Beats	9
Music/Electronic Music I Unit 2 - Applying Electronic Music Components	17
Music/Electronic Music I Unit 3 - Electronic Music Creation	25
Music/Electronic Music I Unit 4 - Project and Portfolio Development	34

## CTECS - Vision of Graduate

### Connecticut Technical Education and Career System

# Vision of a Graduate

*A CTECS Graduate is...*



**A Problem Solver**



**Work Ready**



**Respectful**



**Skilled Socially**



**A Critical Thinker**



**An Effective Communicator**

**The Vision of a Graduate (VoG)** at the Connecticut Technical Education and Career System (CTECS) embodies our commitment to preparing students for success in Connecticut's workforce.

Developed in collaboration with students, parents, staff, and employers, the VoG ensures that CTECS students are not only job-ready but also equipped to lead, innovate, and adapt in a dynamic world.

As educators, we are dedicated to developing these qualities by providing a comprehensive education that empowers our students to achieve their fullest potential and make meaningful contributions to society.

## A Problem Solver

*Problem solvers tackle challenges by identifying root causes of issues, brainstorming solutions, implementing effective strategies, and demonstrating adaptability.*

- Engage students with open-ended, creative thinking tasks that require both conventional and innovative solutions.
- Facilitate group discussions and collaborative projects.
- Use real-world scenarios and hands-on activities.
- Highlight the importance of effort, persistence, and continuous learning.
- Provide regular feedback and encourage reflection.

## Work Ready

*To be work-ready includes a combination of technical expertise, soft skills, and personal qualities that ensure a graduate can effectively contribute to the workplace from day one.*

- Set high standards for punctuality, responsibility, professionalism, and task completion.
- Use project-based learning and collaborative assignments.
- Emphasize clear written and verbal communication.
- Offer practical exercises like mock interviews and resume workshops.
- Integrate technology and teach digital literacy.

## Respectful

*Graduates who embody respectfulness emphasize the importance of treating others with dignity, valuing diversity, and fostering an inclusive and positive environment, both personally and professionally.*

- Demonstrate personal, interpersonal, and professional skills.
- Show respect for diversity.
- Model respect through active listening and empathy.
- Set clear expectations for respectful interactions.
- Promote collaboration and group discussions.
- Celebrate respectful behavior.
- Address disrespect promptly and constructively.

## Skilled Socially

*Graduates who are skilled socially are equipped to navigate social environments, build relationships, and contribute positively to their communities and workplaces.*

- Show awareness of global responsibility to others and the environment.
- Participate in community involvement.
- Design cooperative group projects and team activities
- Set expectations for respect and give regular feedback.
- Facilitate discussions on inclusivity, kindness, and respect.
- Model positive interactions and recognize strong social skills.

## A Critical Thinker

*Critical thinkers approach problems systematically by analyzing, evaluating, and synthesizing information to make well-informed decisions and contribute to innovative solutions.*

- Encourage critical thinking individually and collaboratively.
- Design lessons that challenge assumptions and explore diverse viewpoints.
- Use open-ended questions, rigorous activities, and cross-curricular projects.
- Integrate project-based learning and real-world problem-solving.
- Offer reflective opportunities like journaling and discussions.
- Cultivate an environment that values curiosity and inquiry.

## An Effective Communicator

*Effective communicators convey ideas, information, and emotions accurately and persuasively, fostering understanding and collaboration.*

- Communicate effectively using oral, written, visual, artistic, and technical modes.
- Include group discussions, presentations, and peer reviews.
- Promote active listening and thoughtful responses.
- Offer clear guidelines and constructive feedback.
- Stress clear, respectful, and purposeful communication.

## CTECS Instructional Model

CTECS uses the Marzano Compendium to guide research-based instructional strategies that differentiate learning and promote access, engagement, and success for all students. Teachers apply these strategies to support diverse learners (including multilingual learners, students with disabilities, and students with varied academic or technical backgrounds) through scaffolds, modeling, guided practice, and multiple ways to participate and show understanding. This approach ensures every student can work toward proficiency in the Priority Standards and the competencies outlined in the CTECS Vision of a Graduate.

Feedback	Content	Context
<p><b>Providing and Communicating Clear Learning Goals</b></p> <ol style="list-style-type: none"> <li>1. Providing scales and rubrics</li> <li>2. Tracking student progress</li> <li>3. Celebrating success</li> </ol> <p><b>Using Assessments</b></p> <ol style="list-style-type: none"> <li>4. Using informal assessments of the whole class</li> <li>5. Using formal assessments of individual students</li> </ol>	<p><b>Conducting Direct Instruction Lessons</b></p> <ol style="list-style-type: none"> <li>6. Chunking content</li> <li>7. Processing content</li> <li>8. Recording and representing content</li> </ol> <p><b>Conducting Practicing and Deepening Lessons</b></p> <ol style="list-style-type: none"> <li>9. Using structured practice sessions</li> <li>10. Examining similarities and differences</li> <li>11. Examining errors in reasoning</li> </ol> <p><b>Conducting Knowledge Application Lessons</b></p> <ol style="list-style-type: none"> <li>12. Engaging students in cognitively complex tasks</li> <li>13. Providing resources and guidance</li> <li>14. Generating and defending claims</li> </ol> <p><b>Using Strategies That Appear in All Types of Lessons</b></p> <ol style="list-style-type: none"> <li>15. Previewing strategies</li> <li>16. Highlighting critical information</li> <li>17. Reviewing content</li> <li>18. Revising knowledge</li> <li>19. Reflecting on learning</li> <li>20. Assigning purposeful homework</li> <li>21. Elaborating on information</li> <li>22. Organizing students to interact</li> </ol>	<p><b>Using Engagement Strategies</b></p> <ol style="list-style-type: none"> <li>23. Noticing and reacting when students are not engaged</li> <li>24. Increasing response rates</li> <li>25. Using physical movement</li> <li>26. Maintaining a lively pace</li> <li>27. Demonstrating intensity and enthusiasm</li> <li>28. Presenting unusual information</li> <li>29. Using friendly controversy</li> <li>30. Using academic games</li> <li>31. Providing opportunities for students to talk about themselves</li> <li>32. Motivating and inspiring students</li> </ol> <p><b>Implementing Rules and Procedures</b></p> <ol style="list-style-type: none"> <li>33. Establishing rules and procedures</li> <li>34. Organizing the physical layout of the classroom</li> <li>35. Demonstrating withitness</li> <li>36. Acknowledging adherence to rules and procedures</li> <li>37. Acknowledging lack of adherence to rules and procedures</li> </ol> <p><b>Building Relationships</b></p> <ol style="list-style-type: none"> <li>38. Using verbal and nonverbal behaviors that indicate affection for students</li> <li>39. Understanding students' backgrounds and interests</li> <li>40. Displaying objectivity and control</li> </ol> <p><b>Communicating High Expectations</b></p> <ol style="list-style-type: none"> <li>41. Demonstrating value and respect for reluctant learners</li> <li>42. Asking in-depth questions of reluctant learners</li> <li>43. Probing incorrect answers with reluctant learners</li> </ol>

## Curriculum Introduction

This curriculum document outlines the essential learning for this academic program and provides a clear structure for planning, instruction, and assessment. It includes the components required by NEASC Standard 2.2a, along with elements that reflect the unique nature of CTECS academic programs. The curriculum is organized to show what students learn in each course, how learning progresses across grade levels, and how instruction supports both technical skill development and the CTECS Vision of a Graduate.

Teachers should use this document to:

- Understand the overall structure and expectations of the course sequence
- Reference the Course Map to see the scope and sequence of Priority Standards and the alignment to district assessments
- Use the Priority Standards and Units of Study to guide daily, weekly, and cycle-based planning
- Integrate Big Ideas, Essential Questions, Skills/Learning Outcomes, vocabulary, and resources during lesson design
- Plan and implement formative assessments to monitor progress and guide instruction
- Maintain consistency of technical and artistic practice instruction across campuses while adapting to student needs and industry-based opportunities

## Curriculum Components

### Course Map

A Course Map serves as the scope and sequence for this course by outlining the progression of instructional units and the standards that guide teaching and assessment. While each campus will have individual student needs and cycle schedules, all instructors are expected to teach the standards outlined in the Course Map. Using the Course Map below, teachers will intentionally plan learning experiences that prepare students to meet the identified standards within the designated assessment windows.

### Priority Standards (Units of Study)

Priority Standards identify the most essential learning in the program. They reflect the core competencies and skills that require the greatest instructional focus and appear on program assessments. Priority Standards guide each Unit of Study with big ideas, essential questions, content topics, and skills/learning outcomes aligned to assessments.

## **Vertical Alignment**

Vertical alignment shows how Priority Standards and instructional expectations progress within the program. It provides a clear pathway of skill development, increasing complexity, and technical proficiency across a sequence.

## **Learning Outcomes**

Learning outcomes are what students will know (Concepts) and be able to do (Skills). Concepts identify the major content topics within the Priority Standard (Unit of Study). They appear in the left column of the Learning Outcomes table and follow a similar coding structure as the Priority Standard.

Skills are learning objectives that describe the measurable actions students must be able to perform to demonstrate proficiency. They appear in the right column of the Learning Outcomes table and show the progression of learning evidence in the Priority Standard.

## **Vocabulary**

Essential vocabulary includes the content and academic terms students must understand and use accurately to engage in learning and demonstrate proficiency on assessments. Vocabulary is foundational to communication, and should be a primary initial focus within each unit and taught explicitly through modeling, demonstration, and repeated application.

## **Resources**

Resources include the texts, materials, and digital tools that support learning within each unit to achieve the standards.

## **Assessment Practices**

Teachers use ongoing formative assessments—such as questioning, checks for understanding, performance demonstrations, reflections, and teacher observation—to monitor progress, guide instruction, and support all learners in mastering the Priority Standards.

Each program also includes district assessments, which measure proficiency on the Priority Standards identified in the Course Map. These assessments provide consistent evidence of student learning across campuses and ensure alignment to course expectations and program outcomes. Teachers should reference the Course Map and Units of Study when planning instruction to ensure students have opportunities to practice and demonstrate the skills and knowledge assessed on the district assessments.

## **Music Vision**

The vision for music in the Connecticut Technical Education and Career System (CTECS) is to empower students through Music Education to develop the creativity, communication, collaboration, and critical skills needed for success in the 21st century. Through music's rich cultural heritage and universal language, students grow as expressive, empathetic, and lifelong learners prepared to thrive in a diverse and evolving world.

## **Music Curriculum Philosophy**

The CTECS Music Curriculum 24-25 revision was modeled after CSDE Model Curriculum. The curricula were constructed using the [Connecticut State Department of Education \(CSDE\) K–12 Curricula Design Principles Handbook](#) and the [National Core Arts Standards: A Conceptual Framework for Arts Learning](#) as frameworks to structure and inform the design process in order to ensure access to high quality, high-impact teaching and learning aligned to the content standards adopted by the Connecticut Board of Education to provide CTECS's students access to equitable educational opportunities within a culture of high expectations.

This standards-based curriculum defines what students are expected to learn by course; it provides a roadmap of the essential learning outcomes for mastery by the end of the course. The curriculum combines how teachers will teach to develop skills, content knowledge, and assess students' ability to transfer learning. The structure and organization of curriculum are guided by a curriculum framework that must include standards aligned concepts, skills, high impact instructional methods, high quality materials, and multiple means of assessment aligned to standards.

## Aligned Prioritized Standards

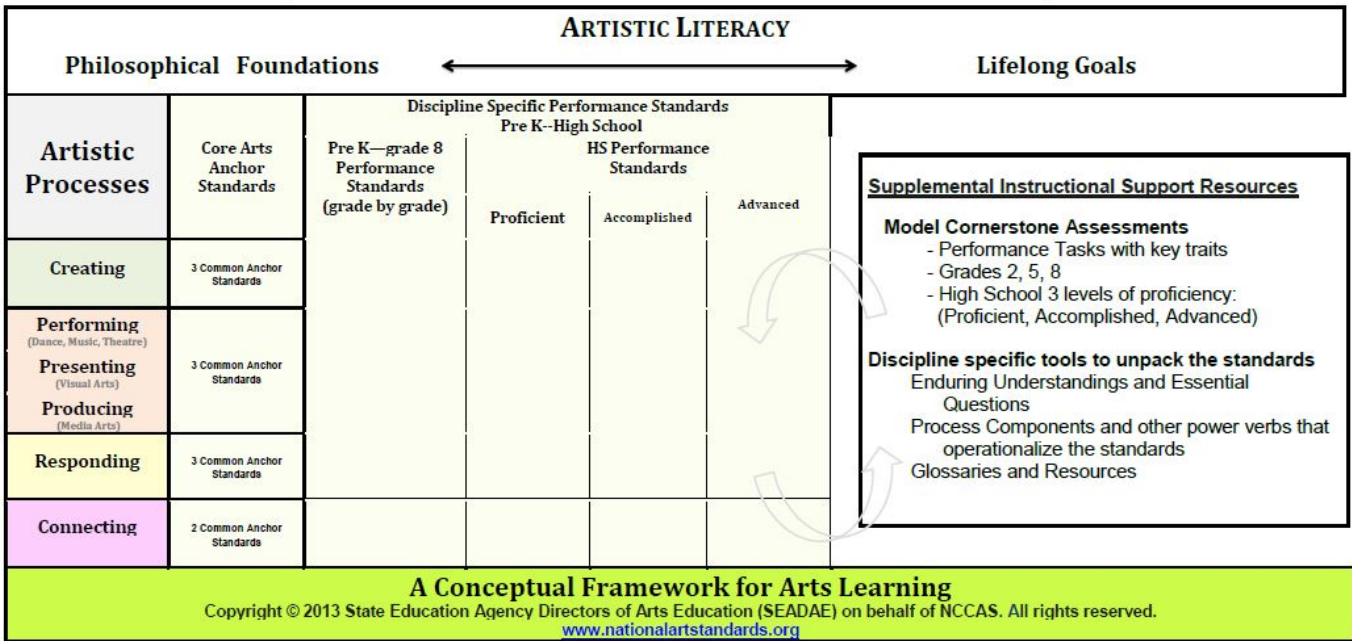
- [CT Arts Standards/National Arts Music Standards](#)
- [National Association for Music Education](#)



### National Core Arts Standards

DANCE MEDIA ARTS MUSIC THEATRE VISUAL ARTS

Feb. 12, 2014



### Electronic Music I Curriculum Prioritized Standards by Unit

	Unit 1	Unit 2	Unit 3	Unit 4
<b>Unit Priority Standards</b>	MU:Cr1.1.C.HSI.a MU:Cr2.1.C..HSI.b MU:Re7.1.T.HSI.a MU:Re7.2.T.HSI.a	MU:Cr2.1.C..HSI.a MU:Cr1.1.T..HSI.1a MU:Re7.1.T.HSI.a MU:Re7.2.T.HSI.a	MU:Cr3.2.C.1a MU:Cr2.1.T.1a MU:Pr4.3.T.1a MU:Re7.1.C.1a MU:Re7.2.C.1a	MU:Pr4.1.C.1a MU:Pr4.2.C.1a MU:Pr4.3.C.1a MU:Cr3.2.T.1a MU:Pr6.1.T.1a

## Electronic Music I Curriculum Unit 1

### Priority Standards Addressed in Unit 1

#### **MU:Cr1.1.C.HSI.a**

Describe how sounds and short musical ideas can be used to represent personal experiences, moods, visual images, and/or storylines.

#### **MU:Cr2.1.C.HSI.b**

Identify and describe the development of sounds or short musical ideas in drafts of music within simple forms (such as one-part, cyclical, or binary).

#### **MU:Re7.1.T.HSI.a**

Cite reasons for choosing music based on the use of the elements of music, digital and electronic aspects, and connections to interest or purpose.

#### **MU:Re7.2.T.HSI.a**

Explain how knowledge of the structure (repetition, similarities, contrasts), technological aspects, and purpose of the music informs the response.

### **Big Ideas:**

- The creative ideas, concepts, and feelings that influence musicians' work emerge from a variety of sources.
- Musicians' creative choices are influenced by their expertise, context, and expressive intent.
- Individuals' selection of musical works is influenced by their interests, experiences, understandings, and purposes.
- Response to music is informed by analyzing context (social, cultural, and historical) and how creators and performers manipulate the elements of music.
- Musicians connect their personal interests, experiences, ideas, and knowledge to creating, performing, and responding.
- Understanding connections to varied contexts and daily life enhances musicians' creating, performing, and responding.
- Performers' interest in and knowledge of musical works, understanding of their own technical skill, and the context for a performance influence the selection of repertoire.
- Analyzing creators' context and how they manipulate elements of music provides insight into their intent and informs performance.

### **Essential Questions:**

- How do musicians generate creative ideas?

- How do musicians make creative decisions?
- How do individuals choose music to experience?
- How does understanding the structure and context of music inform a response?
- How do musicians make meaningful connections to creating, performing, and responding?
- How do the other arts, other disciplines, contexts, and daily life inform creating, performing, and responding to music?
- How do performers select repertoire?
- How does understanding the structure and context of musical works inform performance?

### Learning Outcomes

#### *Students will know:*

#### *As evidenced by: (oral, written, or performance):*

#### **MU:Cr1.1.C.HSI.a**

- Sounds
- Short musical ideas
- Musical elements (rhythm, melody, harmony, tempo, dynamics, timbre, texture, articulation)
- Personal experiences
- Moods / emotions
- Visual images
- Storylines / narratives
- Expression
- Representation

#### **MU:Cr1.1.C.HSI.a**

- Describe how sounds represent experiences, moods, images, or storylines.
- Identify and explain how musical elements create expressive meaning.
- Connect musical ideas to emotions or imagery.
- Demonstrate understanding of how specific sounds communicate intent.

#### **MU:Cr2.1.C..HSI.b**

- Sounds
- Short musical ideas
- Development
- Drafts
- Revision process
- Musical form
- One-part form
- Cyclical form
- Binary form
- Structure
- Patterns
- Contrast
- Repetition

#### **MU:Cr2.1.C..HSI.b**

- Identify changes and development in musical drafts.
- Describe how musical ideas evolve within a piece.
- Analyze the structure of music in simple forms.
- Compare sections within one-part, cyclical, or binary forms.
- Explain how repetition and contrast develop ideas.
- Organize musical ideas within a simple formal structure.
- Revise drafts to strengthen development and form.

<p><b>MU:Re7.1.T.HSI.a</b></p> <ul style="list-style-type: none"> <li>● Elements of music (rhythm, melody, harmony, tempo, dynamics, timbre, texture, form)</li> <li>● Digital aspects</li> <li>● Electronic aspects</li> <li>● Technology tools</li> <li>● Personal interest</li> <li>● Purpose</li> <li>● Musical characteristics</li> <li>● Artistic intent</li> <li>● Criteria</li> </ul>	<p><b>MU:Re7.1.T.HSI.a</b></p> <ul style="list-style-type: none"> <li>● Cite reasons for selecting specific music.</li> <li>● Analyze the elements of music in a piece.</li> <li>● Evaluate digital and electronic aspects of music.</li> <li>● Connect musical characteristics to personal interest or purpose.</li> <li>● Justify music selections using specific criteria.</li> <li>● Support opinions with evidence from the music.</li> </ul>
<p><b>MU:Re7.2.T.HSI.a</b></p> <ul style="list-style-type: none"> <li>● Musical patterns/repetition</li> <li>● Structure or rehearsal texts</li> </ul>	<p><b>MU:Re7.2.T.HSI.a</b></p> <ul style="list-style-type: none"> <li>● Identify and describe similarities and contrasts between rehearsal texts noting musical patterns and repetition.</li> <li>● Understand how these elements inform performance and response to music</li> </ul>

**[Music Standards Glossary](#)**

**Academic Vocabulary**

- 

**Content Vocabulary**

- 

**Resources:**

- **Soundtrap:**
  - <https://www.soundtrap.com/home/edu/groups>
    - Soundtrap educators detailed lesson plans to inspire classroom activities and to make learning fun. These are created by teachers for teachers! Find our entire lesson plan library in the left menu.
- **Audacity (Online)**[https://play.generative.fm/browse:  
<https://www.offidocs.com/media/system/audacityqdrive/google-api-php-client/core/audacitydownload.php>](https://play.generative.fm/browse:https://www.offidocs.com/media/system/audacityqdrive/google-api-php-client/core/audacitydownload.php)
- **Online Exercises:**
  - <https://www.musictheory.net/exercises>
  - <https://www.savethemusic.org/music-education-resources/>
  - <https://www.carnegiehall.org/Explore/Learn/Music-Educators>
  - <https://www.musicalfuturesonline.org/resource-type/music-technology/>
  - <https://albumism.com/>
  - <https://www.pbs.org/opb/historydetectives/feature/the-art-of-turntablism/>
  - <https://music.ishkur.com/>

- <https://www.cambridge-mt.com/ms/mtk/>
- <https://play.generative.fm/browse>

### **Skill Practice:**

- <https://youdj.online/>
- <https://mp3cut.net/equalizer>

### **Cross Cycle Tasks:**

#### *Suggestions:*

- Have students begin reading a brief connected text at the end of the academic and finish during trade cycle.
- Use Google Forms for a questionnaire or survey about upcoming topic.
- Brief writing task related to end of cycle lesson or as a discussion piece for upcoming lesson.
- Student question development about upcoming topic. Provide question starters: *Classroom Question Stems* by Cormier; *DOK*; *Bloom's Taxonomy*.
- Quizlet Study Sets activity.

### **Last day of the Cycle:**

- Students meet in small groups to read and discuss text they will create posts for:
  - Week 1: post 2 reflections and respond to 2 reflections
  - Week 2: post 2 questions or wonderings

### **First day of the New Cycle:**

- Students meet in small groups to discuss reflection, response, and question posts (approx. 15 minutes)

### **Assessments:**

#### **Formative Assessments:**

#### **REQUIRED:**

Here is a bank of 17 formative assessment types for the course unit on the origins and principles of electronic music, designed to be quick (no more than 5 minutes each):

1. **Quick Quiz:** Multiple-choice or true/false questions on key historical milestones, such as the invention of early synthesizers or the contributions of pioneers like Leo Theremin and Robert Moog.
2. **Exit Ticket:** Write a one-sentence summary of the most important concept learned about sound synthesis today.
3. **Flashcard Review:** Use flashcards with key terms like "sampling," "sequencing," and "synthesis" on one side, and definitions or examples on the other; students quickly match them.

- 4. **1-Minute Essay:** In one minute, explain how Morton Subotnick's work influenced contemporary electronic music.
- 5. **Peer Teaching:** In pairs, have students briefly explain a principle of electronic music (e.g., how a synthesizer works) to each other.
- 6. **Quick Reflection:** Have students jot down one way electronic music has influenced a genre they listen to.
- 7. **Poll/Survey:** Conduct a quick poll on which technology (e.g., synthesizers, samplers) students find most interesting and why.
- 8. **Concept Map:** Quickly sketch a simple concept map linking terms like "sequencing," "sampling," and "synthesis" to their applications in music production.
- 9. **Think-Pair-Share:** Pose a question about the cultural impact of electronic music; have students think for 30 seconds, discuss with a partner, then share with the class.
- 10. **Audio Example Identification:** Play a short clip of electronic music and ask students to identify the technique used (e.g., sampling, synthesis).
- 11. **Thumbs Up/Thumbs Down:** Quickly assess understanding by asking students to give a thumbs up or down to statements about electronic music history or principles.
- 12. **Quick Sketch:** Have students sketch a simple diagram of an early synthesizer or the signal flow in a basic electronic music setup.
- 13. **Matching Activity:** Provide a list of electronic music pioneers and a list of their contributions; students quickly match them.
- 14. **Soundtrap/Audacity Task:** Instruct students to complete a 2-minute task, like creating a basic loop or sample in Soundtrap or Audacity, and share with a partner.
- 15. **3-2-1 Activity:** Students quickly write down 3 things they learned, 2 things they found interesting, and 1 question they still have about electronic music.
- 16. Instrumental Performance
- 17. "Other ~ Teacher-directed

### **Summative Assessments:**

#### **REQUIRED:**

Here are three summative assessment types for the course unit on the origins and principles of electronic music:

1. **Research Essay on a Pioneer of Electronic Music:**

**Description:** Students will write a significant-length essay (4-6 pages) on a key figure in the development of electronic music, such as Leo Theremin, Robert Moog, or Morton Subotnick. The essay should cover the individual's contributions to the field, the technological innovations they were involved in, and their influence on contemporary electronic music. Students should also analyze how their work has shaped modern music production and the cultural impact of their innovations.

**Assessment Focus:** Historical research, critical analysis, and synthesis of information.

2. **Original Composition Using Digital Tools:**

**Description:** Students will create an original electronic music composition using Soundtrap or Audacity, incorporating principles learned in the unit, such as sound synthesis, sampling, and sequencing. The composition should be 2-3 minutes in length and must demonstrate the application of historical and technical concepts discussed in class. Students will submit both the audio file and a brief written explanation (1-2 pages) of the techniques and concepts used, as well as how their work is inspired by the historical developments studied in the course.

**Assessment Focus:** Creative application, technical proficiency, and reflective writing.

3. **Student-Driven Project on the Cultural Impact of Electronic Music:**

**Description:** Students will select a topic related to the cultural impact of electronic music and present their findings through a medium of their choice (e.g., a 5-minute video presentation, a podcast episode, a digital poster, or a website). The project should explore how electronic music has influenced a specific genre, social movement, or cultural trend. The project must be approved by the teacher and include both a creative component and a written or verbal explanation of how electronic music has shaped cultural practices or social attitudes.

**Assessment Focus:** Research, creativity, critical thinking, and communication skills.

4. **Student-Driven Original Proposal & Teacher-Approved**

**Opportunities for Interdisciplinary Connections:**

Musicians must connect all disciplines to be successful in our craft. When responding, creating and performing music we are not just musical, we are mathematicians, readers, historians and

artists.

### **Connecticut Core Standards for Literacy in History/Social Studies, Science Technical Subjects**

[https://learning.ccsso.org/wp-content/uploads/2022/11/ELA\\_Standards1.pdf](https://learning.ccsso.org/wp-content/uploads/2022/11/ELA_Standards1.pdf)

### **Connecticut Elementary and Secondary Social Studies Standards: Social Studies Inquiry Arc**

- Reading notes and lyrics from the staff, octavos and sheet music
- Connecting musical experiences with lived experiences through ourselves and others
- Learning historical context of the piece

### **Mathematical Practice Standards**

- Using math skills to count rhythm

### **Next Generation Science Standards**

Standards for students that are aligned to priority standards

<https://www.nextgenscience.org/search-standards>

### **International Society for Technology in Education (ISTE)**

Standards for students that are aligned to priority standards

<https://iste.org/standards/students>

### **CTE Competency Standards**

- Utilizing performances, projects and assignments that are able to connect to our trade technologies:
  - Aerospace Manufacturing
  - Architecture
  - Automotive Technology
  - Automotive Collision Repair and Refinishing
  - Bioscience and Environmental Technology
  - Biotechnology
  - Building and Civil Construction
  - Culinary Arts
  - Criminal Justice and Protective Services
  - Digital Media
  - Diesel and Heavy - Duty Equipment Repair
  - Electrical
  - Graphic Design
  - Heating
  - Ventilation and Air Conditioning
  - Health Technology
  - Hairdressing and Cosmetology
  - Information Technology

- Landscape Design
- Installation and Equipment
- Masonry
- Mechanical Design and Engineering Technology
- Precision Machining Technology
- Plumbing and Heating
- Plumbing, Heating and Cooling
- Robotics and Automation
- Tourism
- Hospitality and Guest Services Management
- Veterinary Science
- Welding and Metal Fabrication

### **Components of Social, Emotional, and Intellectual Habits**

- Develop logic and reasoning/Critical and analytic thinking
- Use evidence and critical thinking to support claims, make arguments and critique the reasoning of others; explain own thinking and responds to others' thinking
- Develop logic and reasoning/Applying known information to new experiences
- Compare, contrast and evaluate experiences, tasks and events building on prior knowledge
- Develop logic and reasoning/Reasoning and problem solving
- Analyze attributes to classify, compare and contrast objects, events and experiences (similarities, differences and associations)
- Develop a positive attitude toward learning/Cooperation during learning experiences
- Listen, discuss, and negotiate ideas in order to discover new learning with peers

## Electronic Music I Curriculum Unit 2

### Priority Standards Addressed in Unit 2

#### **MU:Cr2.1.C..HSI.a**

**Assemble and organize sounds or short musical ideas to create initial expressions of selected experiences, moods, images, or storylines.**

#### **MU:Cr1.1.T.HSI.Ia**

**Generate melodic, rhythmic, and harmonic ideas for compositions or improvisations using digital tools.**

#### **MU:Re7.1.T.HSI.a**

**Cite reasons for choosing music based on the use of the elements of music, digital and electronic aspects, and connections to interest or purpose.**

#### **MU:Re7.2.T.HSI.a**

**Explain how knowledge of the structure (repetition, similarities, contrasts), technological aspects, and purpose of the music informs the response.**

### **Big Ideas:**

- The creative ideas, concepts, and feelings that influence musicians' work emerge from a variety of sources.
- Musicians' creative choices are influenced by their expertise, context, and expressive intent.
- Individuals' selection of musical works is influenced by their interests, experiences, understandings, and purposes.
- Response to music is informed by analyzing context (social, cultural, and historical) and how creators and performers manipulate the elements of music.
- Musicians connect their personal interests, experiences, ideas, and knowledge to creating, performing, and responding.
- Understanding connections to varied contexts and daily life enhances musicians' creating, performing, and responding.
- Performers' interest in and knowledge of musical works, understanding of their own technical skill, and the context for a performance influence the selection of repertoire.
- Analyzing creators' context and how they manipulate elements of music provides insight into their intent and informs performance.

### **Essential Questions:**

- How do musicians generate creative ideas?
- How do musicians make creative decisions?

- How do individuals choose music to experience?
- How does understanding the structure and context of music inform a response?
- How do musicians make meaningful connections to creating, performing, and responding?
- How do the other arts, other disciplines, contexts, and daily life inform creating, performing, and responding to music?
- How do performers select repertoire?
- How does understanding the structure and context of musical works inform performance?

### Learning Outcomes

#### ***Students will know:***

#### ***As evidenced by: (oral, written, or performance):***

#### **MU:Cr2.1.C.HSI.a**

- Sounds
- Short musical ideas
- Organization
- Structure
- Musical elements (rhythm, melody, harmony, tempo, dynamics, timbre)
- Selected experiences
- Moods / emotions
- Images
- Storylines / narratives
- Expression
- Creative choices

#### **MU:Cr2.1.C.HSI.a**

- Organize musical ideas into a clear structure.
- Select and arrange musical elements to express intent.
- Create an initial musical draft based on a chosen theme.
- Develop short musical ideas that reflect an experience, mood, image, or storyline.
- Demonstrate how organization supports expressive meaning.

#### **MU:Cr1.1.T..HSI.1a**

- Melody
- Rhythm
- Harmony
- Motif / musical idea
- Chord / chord progression
- Scale / key
- Tempo / meter
- Beat / subdivision
- Texture
- Form (basic structures)
- MIDI
- Digital Audio Workstation (DAW)
- Virtual instruments
- Loops / samples
- Quantization

#### **MU:Cr1.1.T..HSI.1a**

- Generate original melodic ideas
- Create rhythmic patterns and grooves
- Develop harmonic progressions
- Experiment with pitch and rhythmic variation
- Improvise musical phrases using MIDI controllers
- Record ideas into a DAW
- Manipulate and edit MIDI data
- Use digital tools to layer musical parts
- Explore multiple versions of a musical idea
- Refine ideas based on listening and feedback

<ul style="list-style-type: none"> <li>● Improvisation</li> </ul>	
<p><b>MU:Re7.I.T.HSI.a</b></p> <ul style="list-style-type: none"> <li>● Elements of music (rhythm, melody, harmony, tempo, dynamics, timbre, texture, form)</li> <li>● Digital aspects</li> <li>● Electronic aspects</li> <li>● Technology tools</li> <li>● Personal interest</li> <li>● Purpose</li> <li>● Musical characteristics</li> <li>● Artistic intent</li> <li>● Criteria</li> </ul>	<p><b>MU:Re7.I.T.HSI.a</b></p> <ul style="list-style-type: none"> <li>● Cite reasons for selecting specific music.</li> <li>● Analyze the elements of music in a piece.</li> <li>● Evaluate digital and electronic aspects of music.</li> <li>● Connect musical characteristics to personal interest or purpose.</li> <li>● Justify music selections using specific criteria.</li> <li>● Support opinions with evidence from the music.</li> </ul>
<p><b>MU:Re7.2.T.HSI.a</b></p> <ul style="list-style-type: none"> <li>● Musical patterns/repetition</li> <li>● Structure or rehearsal texts</li> </ul>	<p><b>MU:Re7.2.T.HSI.a</b></p> <ul style="list-style-type: none"> <li>● Identify and describe similarities and contrasts between rehearsal texts noting musical patterns and repetition.</li> <li>● Understand how these elements inform performance and response to music</li> </ul>

**Music Standards Glossary**

**Academic Vocabulary**

- 

**Content Vocabulary**

- 

**Resources:**

- **Soundtrap:**
  - <https://www.soundtrap.com/home/edu/groups>
    - Soundtrap educators detailed lesson plans to inspire classroom activities and to make learning fun. These are created by teachers for teachers! Find our entire lesson plan library in the left menu.
- **Audacity (Online)**<https://play.generative.fm/browse:https://www.offidocs.com/media/system/audacitygdrive/google-api-php-client/core/audacitydownload.php>
- **Online Exercises:**
  - <https://www.musictheory.net/exercises>
  - <https://www.savethemusic.org/music-education-resources/>
  - <https://www.carnegiehall.org/Explore/Learn/Music-Educators>
  - <https://www.musicalfuturesonline.org/resource-type/music-technology/>
  - <https://albumism.com/>

- <https://www.pbs.org/opb/historydetectives/feature/the-art-of-turntablism/>
- <https://music.ishkur.com/>
- <https://www.cambridge-mt.com/ms/mtk/>
- <https://play.generative.fm/browse>

### Skill Practice:

- <https://youDJ.online/>
- <https://mp3cut.net/equalizer>

### Cross Cycle Tasks:

#### Suggestions:

- Have students begin reading a brief connected text at the end of the academic and finish during trade cycle.
- Use Google Forms for a questionnaire or survey about upcoming topic.
- Brief writing task related to end of cycle lesson or as a discussion piece for upcoming lesson.
- Student question development about upcoming topic. Provide question starters: *Classroom Question Stems* by Cormier; *DOK*; *Bloom's Taxonomy*.
- Quizlet Study Sets activity.

### Last day of the Cycle:

- Students meet in small groups to read and discuss text they will create posts for:
  - Week 1: post 2 reflections and respond to 2 reflections
  - Week 2: post 2 questions or wonderings

### First day of the New Cycle:

- Students meet in small groups to discuss reflection, response, and question posts (approx. 15 minutes)

### Assessments:

#### Formative Assessments:

#### REQUIRED:

Here is a bank of 17 formative assessment types for the course unit on the origins and principles of electronic music, designed to be quick (no more than 5 minutes each):

- 1. **Quick Quiz:** Multiple-choice or true/false questions on key historical milestones, such as the invention of early synthesizers or the contributions of pioneers like Leo Theremin and Robert Moog.
- 2. **Exit Ticket:** Write a one-sentence summary of the most important concept learned about sound synthesis today.
- 3. **Flashcard Review:** Use flashcards with key terms like "sampling," "sequencing,"

and "synthesis" on one side, and definitions or examples on the other; students quickly match them.

- 4. **\*\*1-Minute Essay:\*\*** In one minute, explain how Morton Subotnick's work influenced contemporary electronic music.
- 5. **\*\*Peer Teaching:\*\*** In pairs, have students briefly explain a principle of electronic music (e.g., how a synthesizer works) to each other.
- 6. **\*\*Quick Reflection:\*\*** Have students jot down one way electronic music has influenced a genre they listen to.
- 7. **\*\*Poll/Survey:\*\*** Conduct a quick poll on which technology (e.g., synthesizers, samplers) students find most interesting and why.
- 8. **\*\*Concept Map:\*\*** Quickly sketch a simple concept map linking terms like "sequencing," "sampling," and "synthesis" to their applications in music production.
- 9. **\*\*Think-Pair-Share:\*\*** Pose a question about the cultural impact of electronic music; have students think for 30 seconds, discuss with a partner, then share with the class.
- 10. **\*\*Audio Example Identification:\*\*** Play a short clip of electronic music and ask students to identify the technique used (e.g., sampling, synthesis).
- 11. **\*\*Thumbs Up/Thumbs Down:\*\*** Quickly assess understanding by asking students to give a thumbs up or down to statements about electronic music history or principles.
- 12. **\*\*Quick Sketch:\*\*** Have students sketch a simple diagram of an early synthesizer or the signal flow in a basic electronic music setup.
- 13. **\*\*Matching Activity:\*\*** Provide a list of electronic music pioneers and a list of their contributions; students quickly match them.
- 14. **\*\*Soundtrap/Audacity Task:\*\*** Instruct students to complete a 2-minute task, like creating a basic loop or sample in Soundtrap or Audacity, and share with a partner.
- 15. **\*\*3-2-1 Activity:\*\*** Students quickly write down 3 things they learned, 2 things they found interesting, and 1 question they still have about electronic music.
- 16. Instrumental Performance
- 17. "Other ~ Teacher-directed

### **Summative Assessments:**

#### **REQUIRED:**

Here are three summative assessment types for the course unit on the origins and principles

of electronic music:

1. **Research Essay on a Pioneer of Electronic Music:**

**Description:** Students will write a significant-length essay (4-6 pages) on a key figure in the development of electronic music, such as Leo Theremin, Robert Moog, or Morton Subotnick. The essay should cover the individual's contributions to the field, the technological innovations they were involved in, and their influence on contemporary electronic music. Students should also analyze how their work has shaped modern music production and the cultural impact of their innovations.

**Assessment Focus:** Historical research, critical analysis, and synthesis of information.

2. **Original Composition Using Digital Tools:**

**Description:** Students will create an original electronic music composition using Soundtrap or Audacity, incorporating principles learned in the unit, such as sound synthesis, sampling, and sequencing. The composition should be 2-3 minutes in length and must demonstrate the application of historical and technical concepts discussed in class. Students will submit both the audio file and a brief written explanation (1-2 pages) of the techniques and concepts used, as well as how their work is inspired by the historical developments studied in the course.

**Assessment Focus:** Creative application, technical proficiency, and reflective writing.

3. **Student-Driven Project on the Cultural Impact of Electronic Music:**

**Description:** Students will select a topic related to the cultural impact of electronic music and present their findings through a medium of their choice (e.g., a 5-minute video presentation, a podcast episode, a digital poster, or a website). The project should explore how electronic music has influenced a specific genre, social movement, or cultural trend. The project must be approved by the teacher and include both a creative component and a written or verbal explanation of how electronic music has shaped cultural practices or social attitudes.

**Assessment Focus:** Research, creativity, critical thinking, and communication skills.

4. **Student-Driven Original Proposal & Teacher-Approved**

**Opportunities for Interdisciplinary Connections:**

Musicians must connect all disciplines to be successful in our craft. When responding, creating and performing music we are not just musical, we are mathematicians, readers, historians and artists.

### **Connecticut Core Standards for Literacy in History/Social Studies, Science Technical Subjects**

[https://learning.ccsso.org/wp-content/uploads/2022/11/ELA\\_Standards1.pdf](https://learning.ccsso.org/wp-content/uploads/2022/11/ELA_Standards1.pdf)

### **Connecticut Elementary and Secondary Social Studies Standards: Social Studies Inquiry Arc**

- Reading notes and lyrics from the staff, octavos and sheet music
- Connecting musical experiences with lived experiences through ourselves and others
- Learning historical context of the piece

### **Mathematical Practice Standards**

- Using math skills to count rhythm

### **Next Generation Science Standards**

Standards for students that are aligned to priority standards

<https://www.nextgenscience.org/search-standards>

### **International Society for Technology in Education (ISTE)**

Standards for students that are aligned to priority standards

<https://iste.org/standards/students>

### **CTE Competency Standards**

- Utilizing performances, projects and assignments that are able to connect to our trade technologies:
  - Aerospace Manufacturing
  - Architecture
  - Automotive Technology
  - Automotive Collision Repair and Refinishing
  - Bioscience and Environmental Technology
  - Biotechnology
  - Building and Civil Construction
  - Culinary Arts
  - Criminal Justice and Protective Services
  - Digital Media
  - Diesel and Heavy - Duty Equipment Repair
  - Electrical
  - Graphic Design
  - Heating
  - Ventilation and Air Conditioning
  - Health Technology

- Hairdressing and Cosmetology
- Information Technology
- Landscape Design
- Installation and Equipment
- Masonry
- Mechanical Design and Engineering Technology
- Precision Machining Technology
- Plumbing and Heating
- Plumbing, Heating and Cooling
- Robotics and Automation
- Tourism
- Hospitality and Guest Services Management
- Veterinary Science
- Welding and Metal Fabrication

### **Components of Social, Emotional, and Intellectual Habits**

- Develop logic and reasoning/Critical and analytic thinking
- Use evidence and critical thinking to support claims, make arguments and critique the reasoning of others; explain own thinking and responds to others' thinking
- Develop logic and reasoning/Applying known information to new experiences
- Compare, contrast and evaluate experiences, tasks and events building on prior knowledge
- Develop logic and reasoning/Reasoning and problem solving
- Analyze attributes to classify, compare and contrast objects, events and experiences (similarities, differences and associations)
- Develop a positive attitude toward learning/Cooperation during learning experiences
- Listen, discuss, and negotiate ideas in order to discover new learning with peers

## Electronic Music I Curriculum Unit 3

### Priority Standards Addressed in Unit 3

#### **MU:Cr3.2.C.HSI.1a**

**Share music through the use of notation, performance, or technology, and demonstrate how the elements of music have been employed to realize expressive intent.**

#### **MU:Cr2.1.T.HSI.1a**

**Select melodic, rhythmic, and harmonic ideas to develop into a larger work using digital tools and resources.**

#### **MU:Pr4.3.T.HSI.1a**

**Demonstrate how understanding the context, expressive challenges, and use of digital tools in a varied repertoire of music influence prepared or improvised performances.**

#### **MU:Re7.1.C.HSI.1a**

**Apply teacher-provided criteria to select music that expresses a personal experience, mood, visual image, or storyline in simple forms (such as one-part, cyclical, binary), and describe the choices as models for composition.**

#### **MU:Re7.2.C.HSI.1a**

**Analyze aurally the elements of music (including form) of musical works, relating them to style, mood, and context, and describe how the analysis provides models for personal growth as composer, performer, and/or listener.**

#### **Big Ideas:**

- The creative ideas, concepts, and feelings that influence musicians' work emerge from a variety of sources.
- Musicians' creative choices are influenced by their expertise, context, and expressive intent.
- Individuals' selection of musical works is influenced by their interests, experiences, understandings, and purposes.
- Response to music is informed by analyzing context (social, cultural, and historical) and how creators and performers manipulate the elements of music.
- Musicians connect their personal interests, experiences, ideas, and knowledge to creating, performing, and responding.
- Understanding connections to varied contexts and daily life enhances musicians' creating, performing, and responding.
- Performers' interest in and knowledge of musical works, understanding of their own technical skill, and the context for a performance influence the selection of repertoire.
- Analyzing creators' context and how they manipulate elements of music provides insight into their intent and informs performance.

**Essential Questions:**

- How do musicians generate creative ideas?
- How do musicians make creative decisions?
- How do individuals choose music to experience?
- How does understanding the structure and context of music inform a response?
- How do musicians make meaningful connections to creating, performing, and responding?
- How do the other arts, other disciplines, contexts, and daily life inform creating, performing, and responding to music?
- How do performers select repertoire?
- How does understanding the structure and context of musical works inform performance?

**Learning Outcomes**

<b><i>Students will know:</i></b>	<b><i>As evidenced by: (oral, written, or performance):</i></b>
<b>MU:Cr3.2.C.HSI.1a</b> <ul style="list-style-type: none"> <li>● Notation (traditional and/or digital)</li> <li>● Performance</li> <li>● Music technology (DAW, audio file, MIDI)</li> <li>● Elements of music (melody, rhythm, harmony, form, dynamics, timbre, texture)</li> <li>● Expressive intent</li> <li>● Audience</li> <li>● Interpretation</li> <li>● Articulation</li> <li>● Balance / blend</li> <li>● Structure</li> <li>● Presentation format (score, recording, live performance)</li> <li>● Revision</li> <li>● Feedback</li> </ul>	<b>MU:Cr3.2.C.HSI.1a</b> <ul style="list-style-type: none"> <li>● Share completed musical works</li> <li>● Present music using notation, performance, or digital platforms</li> <li>● Explain compositional choices</li> <li>● Demonstrate how musical elements support expressive intent</li> <li>● Perform music with expressive accuracy</li> <li>● Export and publish digital recordings</li> <li>● Use appropriate notation or digital representation</li> <li>● Reflect on effectiveness of presentation</li> <li>● Revise music based on feedback</li> <li>● Justify artistic decisions using music vocabulary</li> </ul>
<b>MU:Cr2.1.T.HSI.1a</b> <ul style="list-style-type: none"> <li>● Melody</li> <li>● Rhythm</li> <li>● Harmony</li> <li>● Motif / musical idea</li> <li>● Chord progression</li> </ul>	<b>MU:Cr2.1.T.HSI.1a</b> <ul style="list-style-type: none"> <li>● Select effective melodic, rhythmic, and harmonic ideas</li> <li>● Evaluate ideas for development potential</li> <li>● Expand short ideas into longer sections</li> </ul>

<ul style="list-style-type: none"> <li>● Scale / key</li> <li>● Tempo / meter</li> <li>● Form (e.g., ABA, verse–chorus)</li> <li>● Arrangement</li> <li>● Development</li> <li>● Variation</li> <li>● Texture</li> <li>● Layering</li> <li>● Digital tools (DAW)</li> <li>● MIDI</li> <li>● Virtual instruments</li> <li>● Audio tracks</li> <li>● Editing tools</li> </ul>	<ul style="list-style-type: none"> <li>● Develop motifs through variation</li> <li>● Arrange musical sections into a cohesive form</li> <li>● Layer tracks to build texture</li> <li>● Use MIDI and audio tools to extend ideas</li> <li>● Edit and refine musical material</li> <li>● Organize sections into a complete composition</li> <li>● Use digital resources to enhance musical structure</li> </ul>
<p><b>MU:Pr4.3.T.HSI.Ia</b></p> <ul style="list-style-type: none"> <li>● Context (historical, cultural, stylistic)</li> <li>● Genre</li> <li>● Repertoire</li> <li>● Performance practice</li> <li>● Expressive intent</li> <li>● Expressive challenges</li> <li>● Interpretation</li> <li>● Improvisation</li> <li>● Style</li> <li>● Audience</li> <li>● Digital tools (DAW, MIDI controller, effects, sequencer)</li> <li>● Sound design</li> <li>● Tempo</li> <li>● Dynamics</li> <li>● Articulation</li> <li>● Texture</li> <li>● Balance</li> <li>● Timing</li> </ul>	<p><b>MU:Pr4.3.T.HSI.Ia</b></p> <ul style="list-style-type: none"> <li>● Analyze musical context before performing</li> <li>● Identify expressive challenges in repertoire</li> <li>● Adjust performance choices based on style</li> <li>● Demonstrate stylistically appropriate interpretation</li> <li>● Use digital tools to enhance performance</li> <li>● Manipulate controllers and effects in real time</li> <li>● Adapt improvisation to fit genre conventions</li> <li>● Balance and blend electronic layers</li> <li>● Modify dynamics, tempo, or articulation intentionally</li> <li>● Explain how context influenced performance decisions</li> </ul>
<p><b>MU:Re7.1.C.HSI.Ia</b></p> <ul style="list-style-type: none"> <li>● Criteria</li> <li>● Personal experience</li> <li>● Mood / emotion</li> <li>● Visual image</li> <li>● Storyline / narrative</li> <li>● Musical selection</li> <li>● Form (one-part, cyclical, binary)</li> <li>● Structure</li> <li>● Musical elements (melody, rhythm, harmony, dynamics, timbre, texture)</li> <li>● Expressive intent</li> <li>● Model (exemplar)</li> <li>● Composer choices</li> </ul>	<p><b>MU:Re7.1.C.HSI.Ia</b></p> <ul style="list-style-type: none"> <li>● Apply teacher-provided criteria to evaluate music</li> <li>● Select music that reflects a specific experience or mood</li> <li>● Identify simple musical forms</li> <li>● Analyze how musical elements create expression</li> <li>● Describe structural characteristics of a piece</li> <li>● Explain why a piece fits selected criteria</li> <li>● Connect expressive qualities to personal interpretation</li> </ul>

<ul style="list-style-type: none"> <li>● Style</li> <li>● Audience</li> </ul>	<ul style="list-style-type: none"> <li>● Use selected works as models for composition</li> <li>● Justify musical choices using appropriate vocabulary</li> </ul>
<p><b>MU:Re7.2.C.HSI.1a</b></p> <ul style="list-style-type: none"> <li>● Aural analysis</li> <li>● Elements of music (melody, rhythm, harmony, form, dynamics, timbre, texture)</li> <li>● Form (e.g., binary, ternary, cyclical)</li> <li>● Style</li> <li>● Genre</li> <li>● Mood / emotion</li> <li>● Context (historical, cultural, social)</li> <li>● Composer choices</li> <li>● Performance practice</li> <li>● Interpretation</li> <li>● Listening strategies</li> <li>● Model (exemplar)</li> <li>● Personal growth</li> <li>● Reflection</li> <li>● Artistic development</li> </ul>	<p><b>MU:Re7.2.C.HSI.1a</b></p> <ul style="list-style-type: none"> <li>● Listen critically to musical works</li> <li>● Analyze musical elements by ear</li> <li>● Identify and describe form</li> <li>● Relate musical elements to style and mood</li> <li>● Connect music to its historical or cultural context</li> <li>● Explain how composer or performer choices shape expression</li> <li>● Compare stylistic characteristics across works</li> <li>● Describe how analysis informs personal composing</li> <li>● Apply listening insights to performance decisions</li> <li>● Reflect on growth as composer, performer, or listener</li> </ul>

**Music Standards Glossary**

**Academic Vocabulary**

- 

**Content Vocabulary**

- 

**Resources:**

- **Soundtrap:**
  - <https://www.soundtrap.com/home/edu/groups>
    - Soundtrap educators detailed lesson plans to inspire classroom activities and to make learning fun. These are created by teachers for teachers! Find our entire lesson plan library in the left menu.
- **Audacity (Online)**<https://play.generative.fm/browse:https://www.offidocs.com/media/system/audacitygdrive/google-api-php-client/core/audacitydownload.php>
- **Online Exercises:**
  - <https://www.musictheory.net/exercises>
  - <https://www.savethemusic.org/music-education-resources/>
  - <https://www.carnegiehall.org/Explore/Learn/Music-Educators>
  - <https://www.musicalfuturesonline.org/resource-type/music-technology/>

- <https://albumism.com/>
- <https://www.pbs.org/opb/historydetectives/feature/the-art-of-turntablism/>
- <https://music.ishkur.com/>
- <https://www.cambridge-mt.com/ms/mtk/>
- <https://play.generative.fm/browse>

**Skill Practice:**

- <https://youdj.online/>
- <https://mp3cut.net/equalizer>

**Cross Cycle Tasks:**

*Suggestions:*

- Have students begin reading a brief connected text at the end of the academic and finish during trade cycle.
- Use Google Forms for a questionnaire or survey about upcoming topic.
- Brief writing task related to end of cycle lesson or as a discussion piece for upcoming lesson.
- Student question development about upcoming topic. Provide question starters: *Classroom Question Stems* by Cormier; *DOK*; *Bloom's Taxonomy*.
- Quizlet Study Sets activity.

**Last day of the Cycle:**

- Students meet in small groups to read and discuss text they will create posts for:
  - Week 1: post 2 reflections and respond to 2 reflections
  - Week 2: post 2 questions or wonderings

**First day of the New Cycle:**

- Students meet in small groups to discuss reflection, response, and question posts (approx. 15 minutes)

**Assessments:**

**Formative Assessments:**

**REQUIRED:**

Here is a bank of 17 formative assessment types for the course unit on the origins and principles of electronic music, designed to be quick (no more than 5 minutes each):

- 1. **\*\*Quick Quiz:\*\*** Multiple-choice or true/false questions on key historical milestones, such as the invention of early synthesizers or the contributions of pioneers like Leo Theremin and Robert Moog.
- 2. **\*\*Exit Ticket:\*\*** Write a one-sentence summary of the most important concept learned about sound synthesis today.

- 3. **Flashcard Review:** Use flashcards with key terms like "sampling," "sequencing," and "synthesis" on one side, and definitions or examples on the other; students quickly match them.
- 4. **1-Minute Essay:** In one minute, explain how Morton Subotnick's work influenced contemporary electronic music.
- 5. **Peer Teaching:** In pairs, have students briefly explain a principle of electronic music (e.g., how a synthesizer works) to each other.
- 6. **Quick Reflection:** Have students jot down one way electronic music has influenced a genre they listen to.
- 7. **Poll/Survey:** Conduct a quick poll on which technology (e.g., synthesizers, samplers) students find most interesting and why.
- 8. **Concept Map:** Quickly sketch a simple concept map linking terms like "sequencing," "sampling," and "synthesis" to their applications in music production.
- 9. **Think-Pair-Share:** Pose a question about the cultural impact of electronic music; have students think for 30 seconds, discuss with a partner, then share with the class.
- 10. **Audio Example Identification:** Play a short clip of electronic music and ask students to identify the technique used (e.g., sampling, synthesis).
- 11. **Thumbs Up/Thumbs Down:** Quickly assess understanding by asking students to give a thumbs up or down to statements about electronic music history or principles.
- 12. **Quick Sketch:** Have students sketch a simple diagram of an early synthesizer or the signal flow in a basic electronic music setup.
- 13. **Matching Activity:** Provide a list of electronic music pioneers and a list of their contributions; students quickly match them.
- 14. **Soundtrap/Audacity Task:** Instruct students to complete a 2-minute task, like creating a basic loop or sample in Soundtrap or Audacity, and share with a partner.
- 15. **3-2-1 Activity:** Students quickly write down 3 things they learned, 2 things they found interesting, and 1 question they still have about electronic music.
- 16. Instrumental Performance
- 17. "Other ~ Teacher-directed

### **Summative Assessments:**

#### **REQUIRED:**

Here are three summative assessment types for the course unit on the origins and principles of electronic music:

1. **Research Essay on a Pioneer of Electronic Music:**

**Description:** Students will write a significant-length essay (4-6 pages) on a key figure in the development of electronic music, such as Leo Theremin, Robert Moog, or Morton Subotnick. The essay should cover the individual's contributions to the field, the technological innovations they were involved in, and their influence on contemporary electronic music. Students should also analyze how their work has shaped modern music production and the cultural impact of their innovations.

**Assessment Focus:** Historical research, critical analysis, and synthesis of information.

2. **Original Composition Using Digital Tools:**

**Description:** Students will create an original electronic music composition using Soundtrap or Audacity, incorporating principles learned in the unit, such as sound synthesis, sampling, and sequencing. The composition should be 2-3 minutes in length and must demonstrate the application of historical and technical concepts discussed in class. Students will submit both the audio file and a brief written explanation (1-2 pages) of the techniques and concepts used, as well as how their work is inspired by the historical developments studied in the course.

**Assessment Focus:** Creative application, technical proficiency, and reflective writing.

3. **Student-Driven Project on the Cultural Impact of Electronic Music:**

**Description:** Students will select a topic related to the cultural impact of electronic music and present their findings through a medium of their choice (e.g., a 5-minute video presentation, a podcast episode, a digital poster, or a website). The project should explore how electronic music has influenced a specific genre, social movement, or cultural trend. The project must be approved by the teacher and include both a creative component and a written or verbal explanation of how electronic music has shaped cultural practices or social attitudes.

**Assessment Focus:** Research, creativity, critical thinking, and communication skills.

4. **Student-Driven Original Proposal & Teacher-Approved**

## **Opportunities for Interdisciplinary Connections:**

Musicians must connect all disciplines to be successful in our craft. When responding, creating and performing music we are not just musical, we are mathematicians, readers, historians and artists.

### **Connecticut Core Standards for Literacy in History/Social Studies, Science Technical Subjects**

[https://learning.ccsso.org/wp-content/uploads/2022/11/ELA\\_Standards1.pdf](https://learning.ccsso.org/wp-content/uploads/2022/11/ELA_Standards1.pdf)

### **Connecticut Elementary and Secondary Social Studies Standards: Social Studies Inquiry Arc**

- Reading notes and lyrics from the staff, octavos and sheet music
- Connecting musical experiences with lived experiences through ourselves and others
- Learning historical context of the piece

### **Mathematical Practice Standards**

- Using math skills to count rhythm

### **Next Generation Science Standards**

Standards for students that are aligned to priority standards

<https://www.nextgenscience.org/search-standards>

### **International Society for Technology in Education (ISTE)**

Standards for students that are aligned to priority standards

<https://iste.org/standards/students>

### **CTE Competency Standards**

- Utilizing performances, projects and assignments that are able to connect to our trade technologies:
  - Aerospace Manufacturing
  - Architecture
  - Automotive Technology
  - Automotive Collision Repair and Refinishing
  - Bioscience and Environmental Technology
  - Biotechnology
  - Building and Civil Construction
  - Culinary Arts
  - Criminal Justice and Protective Services
  - Digital Media
  - Diesel and Heavy - Duty Equipment Repair
  - Electrical
  - Graphic Design
  - Heating

- Ventilation and Air Conditioning
- Health Technology
- Hairdressing and Cosmetology
- Information Technology
- Landscape Design
- Installation and Equipment
- Masonry
- Mechanical Design and Engineering Technology
- Precision Machining Technology
- Plumbing and Heating
- Plumbing, Heating and Cooling
- Robotics and Automation
- Tourism
- Hospitality and Guest Services Management
- Veterinary Science
- Welding and Metal Fabrication

**Components of Social, Emotional, and Intellectual Habits**

- Develop logic and reasoning/Critical and analytic thinking
- Use evidence and critical thinking to support claims, make arguments and critique the reasoning of others; explain own thinking and responds to others' thinking
- Develop logic and reasoning/Applying known information to new experiences
- Compare, contrast and evaluate experiences, tasks and events building on prior knowledge
- Develop logic and reasoning/Reasoning and problem solving
- Analyze attributes to classify, compare and contrast objects, events and experiences (similarities, differences and associations)
- Develop a positive attitude toward learning/Cooperation during learning experiences
- Listen, discuss, and negotiate ideas in order to discover new learning with peers

## Electronic Music I Curriculum Unit 4

### Priority Standards Addressed in Unit 4

#### **MU:Pr4.1.C.1a**

Identify and select specific excerpts, passages, or sections in musical works that express a personal experience, mood, visual image, or storyline in simple forms (such as one-part, cyclical, binary).

#### **MU:Pr4.2.C.1a**

Analyze how the elements of music (including form) of selected works relate to style and mood, and explain the implications for rehearsal or performance.

#### **MU:Pr4.3.C.1a**

Develop interpretations of works based on an understanding of the use of elements of music, style, and mood, explaining how the interpretive choices reflect the creators' intent.

#### **MU:Cr3.2.T.1a**

Share compositions or improvisations that demonstrate a proficient level of musical and technological craftsmanship as well as the use of digital tools and resources in developing and organizing musical ideas.

#### **MU:Pr6.1.T.1a**

Using digital tools, demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music.

#### **Big Ideas:**

- The creative ideas, concepts, and feelings that influence musicians' work emerge from a variety of sources.
- Musicians' creative choices are influenced by their expertise, context, and expressive intent.
- Individuals' selection of musical works is influenced by their interests, experiences, understandings, and purposes.
- Response to music is informed by analyzing context (social, cultural, and historical) and how creators and performers manipulate the elements of music.
- Musicians connect their personal interests, experiences, ideas, and knowledge to creating, performing, and responding.
- Understanding connections to varied contexts and daily life enhances musicians' creating, performing, and responding.
- Performers' interest in and knowledge of musical works, understanding of their own technical skill, and the context for a performance influence the selection of repertoire.

- Analyzing creators' context and how they manipulate elements of music provides insight into their intent and informs performance.

**Essential Questions:**

- How do musicians generate creative ideas?
- How do musicians make creative decisions?
- How do individuals choose music to experience?
- How does understanding the structure and context of music inform a response?
- How do musicians make meaningful connections to creating, performing, and responding?
- How do the other arts, other disciplines, contexts, and daily life inform creating, performing, and responding to music?
- How do performers select repertoire?
- How does understanding the structure and context of musical works inform performance?

**Learning Outcomes**

***Students will know:***

***As evidenced by: (oral, written, or performance):***

**MU:Pr4.1.C.1a**

- Excerpt
- Passage
- Section
- Musical work
- Personal experience
- Mood / emotion
- Visual image
- Storyline / narrative
- Form (one-part, cyclical, binary)
- Structure
- Musical elements (melody, rhythm, harmony, dynamics, timbre, texture)
- Expressive intent
- Contrast
- Repetition
- Theme / motif

**MU:Pr4.1.C.1a**

- Identify specific excerpts within a musical work
- Select passages that communicate a defined mood or experience
- Recognize simple musical forms
- Distinguish contrasting and repeated sections
- Analyze how musical elements create expression
- Connect selected sections to personal interpretation
- Justify selections using music vocabulary
- Compare sections for expressive effectiveness
- Prepare selected excerpts for performance or study

**MU:Pr4.2.C.1a**

**MU:Pr4.2.C.1a**

- Analyze elements of music in selected works

<ul style="list-style-type: none"> <li>● Elements of music (melody, rhythm, harmony, dynamics, timbre, texture, articulation, form)</li> <li>● Form (binary, ternary, cyclical, sectional)</li> <li>● Style / genre</li> <li>● Mood / emotion</li> <li>● Expression / expressive intent</li> <li>● Performance practice</li> <li>● Rehearsal techniques</li> <li>● Musical interpretation</li> <li>● Artistic choices</li> <li>● Tempo / meter</li> <li>● Balance / blend</li> <li>● Phrasing</li> <li>● Audience</li> </ul>	<ul style="list-style-type: none"> <li>● Identify form and structural patterns</li> <li>● Connect musical elements to style and mood</li> <li>● Determine how expressive elements affect performance decisions</li> <li>● Explain implications for rehearsal (e.g., technique, pacing, coordination)</li> <li>● Adjust phrasing, dynamics, or articulation based on analysis</li> <li>● Plan interpretive choices for performance</li> <li>● Reflect on how analysis informs ensemble or solo execution</li> <li>● Justify rehearsal and performance strategies using music vocabulary</li> </ul>
<p><b>MU:Pr4.3.C.1a</b></p> <ul style="list-style-type: none"> <li>● Elements of music (melody, rhythm, harmony, dynamics, timbre, texture, articulation, form)</li> <li>● Style / genre</li> <li>● Mood / emotion</li> <li>● Expressive intent</li> <li>● Composer / creator choices</li> <li>● Interpretation</li> <li>● Performance practice</li> <li>● Phrasing</li> <li>● Articulation</li> <li>● Dynamics / contrast</li> <li>● Audience</li> <li>● Form / structure</li> <li>● Tempo / meter</li> </ul>	<p><b>MU:Pr4.3.C.1a</b></p> <ul style="list-style-type: none"> <li>● Develop personal or ensemble interpretations of a work</li> <li>● Analyze elements of music to guide interpretive decisions</li> <li>● Relate style and mood to expressive choices</li> <li>● Explain how performance choices reflect the creator's intent</li> <li>● Adjust phrasing, dynamics, articulation, and tempo to support interpretation</li> <li>● Communicate expressive intent to an audience</li> <li>● Compare multiple interpretive options</li> <li>● Reflect on the effectiveness of performance decisions</li> <li>● Justify interpretive choices using music vocabulary</li> </ul>
<p><b>MU:Cr3.2.T.1a</b></p> <ul style="list-style-type: none"> <li>● Composition</li> <li>● Improvisation</li> <li>● Musical ideas (melody, rhythm, harmony, form, texture, dynamics, timbre)</li> <li>● Musical craftsmanship (organization, coherence, balance)</li> <li>● Technological tools (DAW, MIDI, virtual instruments, effects)</li> <li>● Digital resources (loops, samples, audio tracks)</li> <li>● Development of musical ideas</li> </ul>	<p><b>MU:Cr3.2.T.1a</b></p> <ul style="list-style-type: none"> <li>● Share completed compositions or improvisations</li> <li>● Demonstrate proficiency in digital music production tools</li> <li>● Develop and organize musical ideas effectively</li> <li>● Apply musical elements with expressive intent</li> <li>● Use digital tools to edit, layer, and refine tracks</li> <li>● Present music via notation, recording, or live performance</li> </ul>

<ul style="list-style-type: none"> <li>● Organization / structure</li> <li>● Expressive intent</li> <li>● Performance or presentation formats</li> <li>● Editing / refining techniques</li> <li>● Audience</li> </ul>	<ul style="list-style-type: none"> <li>● Demonstrate technological craftsmanship in sound quality and arrangement</li> <li>● Explain compositional choices and organization</li> <li>● Reflect on effectiveness of musical and technological decisions</li> <li>● Integrate feedback to improve shared works</li> </ul>
---	---

<p><b>MU:Pr6.1.T.1a</b></p> <ul style="list-style-type: none"> <li>● Technical accuracy</li> <li>● Expressive qualities</li> <li>● Prepared performance</li> <li>● Improvised performance</li> <li>● Repertoire (varied genres / styles)</li> <li>● Digital tools (DAW, MIDI controllers, sequencers, effects, virtual instruments)</li> <li>● Tempo / rhythm</li> <li>● Dynamics</li> <li>● Articulation</li> <li>● Pitch / intonation</li> <li>● Timing / meter</li> <li>● Style / genre conventions</li> <li>● Interpretation</li> <li>● Sound design</li> <li>● Audience</li> </ul>	<p><b>MU:Pr6.1.T.1a</b></p> <ul style="list-style-type: none"> <li>● Perform music with technical accuracy using digital tools</li> <li>● Demonstrate expressive qualities in prepared performances</li> <li>● Improvise musical material appropriately for style and context</li> <li>● Apply tempo, dynamics, and articulation effectively</li> <li>● Manipulate digital tools (loops, MIDI, effects) to support performance</li> <li>● Adjust performance choices to communicate mood and style</li> <li>● Balance and blend sounds in electronic and digital performance</li> <li>● Maintain timing, pitch, and rhythmic precision</li> <li>● Reflect on technical and expressive aspects of performance</li> <li>● Integrate feedback to improve both prepared and improvised performances</li> </ul>
---	--

**[Music Standards Glossary](#)**

**Academic Vocabulary**

- 

**Content Vocabulary**

- 

**Resources:**

- **Soundtrap:**
  - <https://www.soundtrap.com/home/edu/groups>
    - Soundtrap educators detailed lesson plans to inspire classroom activities and to make learning fun. These are created by teachers for teachers! Find our entire lesson plan library in the left menu.
- **Audacity (Online)**[https://play.generative.fm/browse:  
<https://www.offidocs.com/media/system/audacitygdrive/google-api-php->](https://play.generative.fm/browse:https://www.offidocs.com/media/system/audacitygdrive/google-api-php-)

<client/core/audacitydownload.php>

- Online Exercises:
  - <https://www.musictheory.net/exercises>
  - <https://www.savethemusic.org/music-education-resources/>
  - <https://www.carnegiehall.org/Explore/Learn/Music-Educators>
  - <https://www.musicalfuturesonline.org/resource-type/music-technology/>
  - <https://albumism.com/>
  - <https://www.pbs.org/opb/historydetectives/feature/the-art-of-turntablism/>
  - <https://music.ishkur.com/>
  - <https://www.cambridge-mt.com/ms/mtk/>
  - <https://play.generative.fm/browse>

### **Skill Practice:**

- <https://youdj.online/>
- <https://mp3cut.net/equalizer>

### **Cross Cycle Tasks:**

*Suggestions:*

- Have students begin reading a brief connected text at the end of the academic and finish during trade cycle.
- Use Google Forms for a questionnaire or survey about upcoming topic.
- Brief writing task related to end of cycle lesson or as a discussion piece for upcoming lesson.
- Student question development about upcoming topic. Provide question starters: *Classroom Question Stems* by Cormier; *DOK*; *Bloom's Taxonomy*.
- Quizlet Study Sets activity.

### **Last day of the Cycle:**

- Students meet in small groups to read and discuss text they will create posts for:
  - Week 1: post 2 reflections and respond to 2 reflections
  - Week 2: post 2 questions or wonderings

### **First day of the New Cycle:**

- Students meet in small groups to discuss reflection, response, and question posts (approx. 15 minutes)

### **Assessments:**

#### **Formative Assessments:**

#### **REQUIRED:**

Here is a bank of 17 formative assessment types for the course unit on the origins and principles of electronic music, designed to be quick (no more than 5 minutes each):

- 1. **Quick Quiz:** Multiple-choice or true/false questions on key historical milestones, such as the invention of early synthesizers or the contributions of pioneers like Leo Theremin and Robert Moog.
- 2. **Exit Ticket:** Write a one-sentence summary of the most important concept learned about sound synthesis today.
- 3. **Flashcard Review:** Use flashcards with key terms like "sampling," "sequencing," and "synthesis" on one side, and definitions or examples on the other; students quickly match them.
- 4. **1-Minute Essay:** In one minute, explain how Morton Subotnick's work influenced contemporary electronic music.
- 5. **Peer Teaching:** In pairs, have students briefly explain a principle of electronic music (e.g., how a synthesizer works) to each other.
- 6. **Quick Reflection:** Have students jot down one way electronic music has influenced a genre they listen to.
- 7. **Poll/Survey:** Conduct a quick poll on which technology (e.g., synthesizers, samplers) students find most interesting and why.
- 8. **Concept Map:** Quickly sketch a simple concept map linking terms like "sequencing," "sampling," and "synthesis" to their applications in music production.
- 9. **Think-Pair-Share:** Pose a question about the cultural impact of electronic music; have students think for 30 seconds, discuss with a partner, then share with the class.
- 10. **Audio Example Identification:** Play a short clip of electronic music and ask students to identify the technique used (e.g., sampling, synthesis).
- 11. **Thumbs Up/Thumbs Down:** Quickly assess understanding by asking students to give a thumbs up or down to statements about electronic music history or principles.
- 12. **Quick Sketch:** Have students sketch a simple diagram of an early synthesizer or the signal flow in a basic electronic music setup.
- 13. **Matching Activity:** Provide a list of electronic music pioneers and a list of their contributions; students quickly match them.
- 14. **Soundtrap/Audacity Task:** Instruct students to complete a 2-minute task, like creating a basic loop or sample in Soundtrap or Audacity, and share with a partner.
- 15. **3-2-1 Activity:** Students quickly write down 3 things they learned, 2 things they found interesting, and 1 question they still have about electronic music.

- 16. Instrumental Performance
- 17. "Other ~ Teacher-directed

### **Summative Assessments:**

#### **REQUIRED:**

Here are three summative assessment types for the course unit on the origins and principles of electronic music:

1. **\*\*Research Essay on a Pioneer of Electronic Music:\*\***

**\*\*Description:\*\*** Students will write a significant-length essay (4-6 pages) on a key figure in the development of electronic music, such as Leo Theremin, Robert Moog, or Morton Subotnick. The essay should cover the individual's contributions to the field, the technological innovations they were involved in, and their influence on contemporary electronic music. Students should also analyze how their work has shaped modern music production and the cultural impact of their innovations.

**\*\*Assessment Focus:\*\*** Historical research, critical analysis, and synthesis of information.

2. **\*\*Original Composition Using Digital Tools:\*\***

**\*\*Description:\*\*** Students will create an original electronic music composition using Soundtrap or Audacity, incorporating principles learned in the unit, such as sound synthesis, sampling, and sequencing. The composition should be 2-3 minutes in length and must demonstrate the application of historical and technical concepts discussed in class. Students will submit both the audio file and a brief written explanation (1-2 pages) of the techniques and concepts used, as well as how their work is inspired by the historical developments studied in the course.

**\*\*Assessment Focus:\*\*** Creative application, technical proficiency, and reflective writing.

3. **\*\*Student-Driven Project on the Cultural Impact of Electronic Music:\*\***

**\*\*Description:\*\*** Students will select a topic related to the cultural impact of electronic music and present their findings through a medium of their choice (e.g., a 5-minute video presentation, a podcast episode, a digital poster, or a website). The project should explore how electronic music has influenced a specific genre, social movement, or cultural trend. The project must be approved by the teacher and include both a

creative component and a written or verbal explanation of how electronic music has shaped cultural practices or social attitudes.

**\*\*Assessment Focus:\*\*** Research, creativity, critical thinking, and communication skills.

4. **\*\*Student-Driven Original Proposal & Teacher-Approved**

### **Opportunities for Interdisciplinary Connections:**

Musicians must connect all disciplines to be successful in our craft. When responding, creating and performing music we are not just musical, we are mathematicians, readers, historians and artists.

### **Connecticut Core Standards for Literacy in History/Social Studies, Science Technical Subjects**

[https://learning.ccsso.org/wp-content/uploads/2022/11/ELA\\_Standards1.pdf](https://learning.ccsso.org/wp-content/uploads/2022/11/ELA_Standards1.pdf)

#### **Connecticut Secondary Social Studies Standards: Social Studies Inquiry Arc**

- Reading notes and lyrics from the staff, octavos and sheet music
- Connecting musical experiences with lived experiences through ourselves and others
- Learning historical context of the piece

### **Mathematical Practice Standards**

- Using math skills to count rhythm

### **Next Generation Science Standards**

Standards for students that are aligned to priority standards

<https://www.nextgenscience.org/search-standards>

### **International Society for Technology in Education (ISTE)**

Standards for students that are aligned to priority standards

<https://iste.org/standards/students>

### **CTE Competency Standards**

- 

### **Components of Social, Emotional, and Intellectual Habits**

- Develop logic and reasoning/Critical and analytic thinking
- Use evidence and critical thinking to support claims, make arguments and critique the reasoning of others; explain own thinking and responds to others' thinking
- Develop logic and reasoning/Applying known information to new experiences
- Compare, contrast and evaluate experiences, tasks and events building on prior knowledge
- Develop logic and reasoning/Reasoning and problem solving
- Analyze attributes to classify, compare and contrast objects, events and experiences

(similarities, differences and associations)

- Develop a positive attitude toward learning/Cooperation during learning experiences
- Listen, discuss, and negotiate ideas in order to discover new learning with peers