



# Regional Occupational Program

## Emergency Medical Responder A-G

### 2025-2026

#### Patient Care Pathway

### COURSE DESCRIPTION

**An Emergency Responder is the first medically trained person to arrive on a scene of an emergency. The Emergency Responder provides care to injured persons and assists other emergency medical service providers. This course will train students on how to recognize emergency situations, maintain personal safety, and provide basic emergency care including CPR and First Aid, prevention of disease transmission, along with an understanding of ethical and legal considerations. This course will prepare students who are interested in a career as a firefighter, law enforcement officer, emergency medical technician, or paramedic. Activities in this course include work-based learning that connects students to industry and the local community.**

#### Course Information:

Course Length: 1 Year  
 Prerequisite: Medical Core 1  
 Course Level: Capstone  
 UC: Yes G - Interdisciplinary  
 Articulated: Yes - CHC  
 Industry Cert.: CPR, First Aide, EMR  
 Industry Sector: Health Science and Medical Technology  
 Pathway: Patient Care  
 CALPADS: 7922

#### O\*Net SOC Codes:

53-3011 Ambulance Drivers and Attendants  
 29-2043 Paramedics  
 29-2042 Emergency Medical Technician and Paramedics

#### Legend:

CTE - PS CTE Pathway Standards  
 CRP Career Ready Practices  
 CTE - AS CTE Anchor Standards  
 CCSS Common Core State Standards  
 ISTE International Society for Technology in Education

*Includes updates from 24/25 Health Science and Medical Technology Advisory  
[Advisory Minutes](#)*

## Emergency Medical Responder (EMR)

### Course Orientation

- a. Discuss objectives for this course, including competencies, teacher expectations, classroom policies, and procedures.
- b. Identify and discuss the acquisition of transferable skills (communication, collaboration, creativity, and critical thinking) and their importance to being college and career ready and for future personal and professional success.
- c. Review objectives, competencies, and course syllabus.
- d. Discuss student and teacher expectations, including behavior, class rules, appropriate dress, pre-course knowledge, and grading policies, including enrollment and attendance requirements and procedures, and classroom/school safety and disaster procedures.
- e. Discuss next steps in course sequence related to the career pathway, the need for reinforcement of basic skills, transferrable skills, and postsecondary and career options.
- f. Discuss the Big Six: Career Ready Essentials and the Standards for Career Ready Practice as they relate to this course, all aspects of the industry sector, and being college and career ready.

### Big Six: Career Ready Essentials

1. Effective Communication	CTE – PS	CRP	CTE - AS	CCSS	ISTE
<ol style="list-style-type: none"> <li>a. <b>Demonstrate effective verbal communication and conflict resolution skills.</b></li> <li>b. <b>Use the writing process to develop written communication with the appropriate tone, organization, and format for the identified audience.</b></li> <li>c. Explain the effect of interpersonal skills on one's ability to communicate effectively and develop relationships.</li> <li>d. Describe the impact of ineffective communication on business relationships.</li> <li>e. Analyze the impact of vocabulary, body language, and tone on verbal communication.</li> <li>f. Demonstrate active listening skills.</li> <li>g. Accurately interpret industry-specific written communication.</li> <li>h. Model responsible and effective use of various communication technologies.</li> <li>i. Identify valid and reliable digital reference and resource materials.</li> <li>j. Gather information from multiple digital sources to compare and contrast, synthesize, and summarize.</li> <li>k. Identify and use appropriate communication and collaboration technologies.</li> <li>l. Utilize technology to problem solve, accomplish tasks, and to produce or publish products.</li> </ol>		<u>1</u> <u>2</u> <u>11</u>	<u>2</u> <u>3</u> <u>4</u> <u>5</u> <u>7</u> <u>8</u> <u>9</u> <u>10</u> <u>11</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u>  <u>SLS</u> <u>11-12.2</u> <u>9-10</u> <u>11-12.1</u> <u>11-12.1d</u>  <u>WS</u> <u>11-12.7</u> <u>11-12.6</u>	<u>1b,c</u> <u>2c</u> <u>3b,c</u> <u>5c</u> <u>6b,c,d</u>
2. Collaboration, Creativity, and Critical Thinking	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ol style="list-style-type: none"> <li>a. <b>Demonstrate critical thinking skills for a variety of purposes and in different settings.</b></li> <li>b. <b>Collaborate to reach consensus on an identical objective through the sharing of knowledge, tasks, and learning.</b></li> <li>c. Discuss the importance of the critical thinking process to real-world applications.</li> <li>d. Evaluate the impact of creative thinking on problem solving and innovation in real-world applications.</li> </ol>		<u>2</u> <u>4</u> <u>5</u> <u>7</u> <u>9</u> <u>10</u>	<u>2</u> <u>3</u> <u>4</u> <u>5</u> <u>7</u> <u>8</u>	<u>LS</u> <u>9-10</u> <u>11- 12.6</u>  <u>SLS</u> <u>9-10</u>	<u>1c</u> <u>3c,d</u> <u>4a-d</u> <u>5c,d</u> <u>6c</u> <u>7b,c,d</u>

<ul style="list-style-type: none"> <li>e. Compile work that demonstrates the process used to (elaborate, refine, analyze) evaluate original ideas and maximize creative efforts.</li> <li>f. Apply divergent and convergent thinking to the development of an original idea or solution.</li> <li>g. Examine real-world limits to adopting ideas.</li> <li>h. Demonstrate creative thinking (preparation, insight, evaluation, elaboration, and communication) to create a new idea or concept.</li> <li>i. Assume shared responsibility for collaborative work, and value the individual contributions made by each team member.</li> <li>j. Evaluate evidence, arguments, claims, and beliefs to identify connections.</li> <li>k. Identify bias, prejudice, propaganda, self-deception, distortion, and misinformation.</li> <li>l. Produce intellectual, informational, or material products that serve an authentic purpose.</li> <li>m. Work effectively and respectfully with those from diverse backgrounds or cultures.</li> <li>n. Demonstrate respect, trust, commitment, and the ability to compromise in collaborative projects.</li> </ul>		<a href="#">11</a>	<a href="#">9</a> <a href="#">11</a>	<a href="#">11-12.1</a> <a href="#">11-12.1d</a> <a href="#">11-12.2</a>  <b>WS</b> <a href="#">11-12.7</a> <a href="#">11-12.6</a>	
<b>3. Leaders and Teams: Roles and Responsibilities</b>	<b>CTE – PS</b>	<b>CRP</b>	<b>CTE - AS</b>	<b>CCSS</b>	<b>ISTE</b>
<ul style="list-style-type: none"> <li>a. <b>Determine the individual and team members' roles and responsibilities.</b></li> <li>b. <b>Demonstrate leadership skills and qualities (i.e., reliability, negotiation skills, initiative, positive reinforcement, recognition of others' efforts, problem-solving skills, conflict resolution, and delegation).</b></li> <li>c. Explain the importance of technical, social, and communication skills to team success.</li> <li>d. Compare and contrast leadership styles and their effectiveness in various situations.</li> <li>e. Organize and delegate responsibilities in a team setting to encourage ideas, perspectives, and contributions from all team members.</li> <li>f. Develop a strong sense of team identity by brainstorming solutions, volunteering, assisting others, practicing respect and courtesy, and taking initiative.</li> <li>g. Examine situations in which a follower becomes the leader.</li> <li>h. Describe twenty-first-century skills required across all occupations.</li> <li>i. Identify and discuss the characteristics of a successful team (i.e., leadership, cooperation, and effective decision-making).</li> <li>j. Leverage social and cultural differences to increase innovation and quality of work.</li> </ul>		<a href="#">7</a> <a href="#">8</a> <a href="#">9</a>	<a href="#">3</a> <a href="#">7</a> <a href="#">8</a> <a href="#">9</a> <a href="#">11</a>	<b>SLS</b> <a href="#">11-12.2</a> <a href="#">9-10</a> <a href="#">11-12.1</a> <a href="#">11-12.1d</a>  <b>WS</b> <a href="#">11-12.6</a>	<a href="#">7a,c</a>
<b>4. Legal, Ethical, and Environmental Considerations</b>	<b>CTE - PS</b>	<b>CRP</b>	<b>CTE - AS</b>	<b>CCSS</b>	<b>ISTE</b>
<ul style="list-style-type: none"> <li>a. <b>Demonstrate industry specific ethical and legal practices.</b></li> <li>b. <b>Identify eco-friendly industry specific practices and resources.</b></li> <li>c. Identify local, state, and federal regulatory agencies, entities, laws, and regulations.</li> <li>d. Identify discrimination based on race, nationality, religion, gender, age, disability, or sexual orientation.</li> <li>e. Summarize the ethical and legal implications of workplace discrimination and harassment.</li> </ul>		<a href="#">5</a> <a href="#">7</a> <a href="#">8</a> <a href="#">12</a>	<a href="#">3</a> <a href="#">5</a> <a href="#">7</a> <a href="#">8</a> <a href="#">9</a> <a href="#">11</a>	<b>WS</b> <a href="#">11-12.6</a> <a href="#">11-12.7</a>  <b>SLS</b> <a href="#">9-10</a>	<a href="#">2a,b</a> <a href="#">3a,b</a> <a href="#">5c</a> <a href="#">6c</a>

<ul style="list-style-type: none"> <li>f. Explain the concept of corporate citizenship.</li> <li>g. Examine an employer's role in protecting the health and welfare of employees, the community, and the environment.</li> <li>h. Analyze current environmental laws and regulations and their impact on industry.</li> <li>i. Compare and contrast both society's and industry's impact on the environment.</li> </ul>				<a href="#">11-12.1</a> <a href="#">11-12.1d</a> <a href="#">11-12.2</a>	
<b>5. Personal Growth and Career Planning</b>	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> <li>a. <b>Demonstrate continued personal development and growth.</b></li> <li>b. <b>Develop and manage a personal growth and career plan.</b></li> <li>c. Explain the relationship between sound financial habits and financial security.</li> <li>d. Create and manage a personal financial plan.</li> <li>e. Demonstrate initiative in achieving personal and professional goals.</li> <li>f. Apply time management strategies to meet deadlines.</li> <li>g. Demonstrate a growth mindset through flexibility and a positive attitude.</li> <li>h. Select and demonstrate appropriate job-search and retention techniques.</li> <li>i. Demonstrate strategies to prepare for employment.</li> <li>j. Demonstrate interpersonal skills appropriate for the workplace.</li> <li>k. Elaborate on the importance of perseverance to personal and professional success.</li> <li>l. Discover personal career interests, aptitudes, and skills.</li> </ul>		<u>1</u> <u>2</u> <u>3</u> <u>4</u> <u>6</u>	<u>2</u> <u>3</u> <u>4</u> <u>7</u> <u>8</u> <u>11</u>	<u>LS</u> 9-10 <a href="#">11-12.6</a>  <u>SLS</u> 9-10 <a href="#">11-12.1</a> <a href="#">11-12.1d</a> <a href="#">11-12.2</a>  <u>WS</u> <a href="#">11-12.6</a>	1a 3a,c 4d 6a,d 7b
<b>6. Workplace Safety and Personal Wellness</b>	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> <li>a. <b>Demonstrate proper industry specific safe work practices to prevent injury or illness.</b></li> <li>b. <b>Assess the potential impact of goal setting on personal and professional success.</b></li> <li>c. Describe the role of security and emergency procedures in workplace safety.</li> <li>d. Describe the effect of preventative measures on emergencies in the workplace.</li> <li>e. Identify and describe the causes, prevention, and treatment of common accidents.</li> <li>f. Identify local, state, and federal agencies that regulate workplace safety.</li> <li>g. Explain the role of the California Occupational Safety and Health Administration (Cal-OSHA) and the Environmental Protection Agency (EPA).</li> <li>h. Discuss the basics of system operations.</li> <li>i. Demonstrate the proper use of personal protective equipment (PPE).</li> <li>j. Explain the purpose of and accurately interpret a Safety Data Sheet (SDS).</li> <li>k. Identify hazardous materials and chemicals.</li> <li>l. Demonstrate proper procedures to respond to work-related accidents and injuries.</li> <li>m. Describe how ergonomics, housekeeping, and maintenance are related to accidents and injuries.</li> <li>n. Demonstrate cyber ethics, cyber safety, and cybersecurity.</li> <li>o. Assess the potential impact of preventative physical and mental health measures on workplace safety.</li> </ul>		<u>2</u> <u>5</u> <u>6</u> <u>8</u> <u>12</u>	<u>2</u> <u>5</u> <u>6</u> <u>7</u> <u>8</u> <u>10</u> <u>11</u>	<u>LS</u> 9-10 <a href="#">11-12.6</a>  <u>WS</u> <a href="#">11-12.7</a> <a href="#">11-12.6</a>  <u>SLS</u> 9-10 <a href="#">11-12.1</a> <a href="#">11-12.1d</a>	1a,d 2a,d 5b

## Emergency Medical Responder Units of Instruction

7. Emergency Medical System (EMS)	CTE-PS	CRP	CTE- AS	CCSS	ISTE
<ul style="list-style-type: none"> <li>a. Describe the role and function of the Public Health System at the local, state, national, and international levels.</li> <li>b. Explain the importance of continuing education/professional development.</li> <li>c. Identify and discuss the four levels of EMS training and licensure.</li> <li>d. Describe the elements of an EMS system.</li> <li>e. Explain the background and development of the EMS system.</li> <li>f. Identify current and emerging technology as it relates to health and EMS systems.</li> </ul>		<u>2</u> <u>4</u> <u>11</u>	<u>2</u> <u>4</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u>  <u>WS</u> <u>11-12.6</u>	
8. Role of the Emergency Responder	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> <li>a. Explain the scope of practice for an Emergency Responder in various situations.</li> <li>b. Identify medical and non-medical equipment needed when responding to a call.</li> <li>c. Describe the role of an Emergency Responder.</li> <li>d. Demonstrate methods for helping various types of patients (e.g., elderly, chronic care, disabled, hearing/visually impaired, non-English speaking, developmentally disabled, behavioral, etc.).</li> </ul>	<u>B7.4</u> <u>B13.0</u> <u>B13.1</u> <u>B13.3</u> <u>B13.6</u>	<u>1</u> <u>2</u> <u>4</u>	<u>2</u> <u>4</u> <u>11</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u>  <u>WS</u> <u>11-12.6</u>	
9. Legal and Ethical Issues	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> <li>a. Define confidentiality, HIPAA, and ethical aspects of confidentiality.</li> <li>b. Explain the importance of Do Not Resuscitate (DNR) and advanced directives.</li> <li>c. Define “duty to act” as it applies to an Emergency Responder.</li> <li>d. Identify the need for and types of consent necessary to provide emergency medical services.</li> <li>e. Explain the importance of crime scene preservation and working with law enforcement.</li> <li>f. Describe the ethical responsibilities of an Emergency Responder.</li> <li>g. Describe the medical-legal responsibilities in suspected abuse cases.</li> <li>h. Explain the “Good Samaritan” law and how it applies to various professions.</li> </ul>	<u>B6.6</u> <u>B10.0</u>	<u>1</u> <u>2</u> <u>5</u> <u>7</u> <u>8</u> <u>12</u>	<u>2</u> <u>5</u> <u>7</u> <u>8</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u>  <u>WS</u> <u>11-12.7</u>  <u>SLS</u> <u>9-10</u> <u>11-12.1d</u>	
10. Communication and Documentation	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> <li>a. Explain the importance of accurate documentation.</li> <li>b. Identify the information required in a patient care report.</li> <li>c. Explain the emotional reactions that may be experienced by Emergency Responders, patients, family, and bystanders when faced with an emergency situation.</li> <li>d. Describe the importance of understanding the response to death and dying and communicating effectively with the patient’s family.</li> <li>e. Identify methods for overcoming common barriers in communication during an emergency.</li> </ul>	<u>B5.0-2</u> <u>B5.4</u> <u>B5.5</u> <u>B6.0-4</u> <u>B6.6</u> <u>B7.3</u>	<u>1</u> <u>2</u> <u>4</u> <u>12</u>	<u>2</u> <u>4</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u>  <u>WS</u> <u>11-12.6</u>	

11. Anatomy and Medical Terminology	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<p>a. <b>Demonstrate the ability to use medical terms in their proper context.</b></p> <p>b. <b>Identify common medical abbreviations.</b></p> <p>c. List and define basic word elements related to anatomy and physiology.</p> <p>d. Define anatomical directional terms.</p> <p>e. Locate landmarks of the human skull, facial, neck, abdomen, and extremities. Identify vital centers of the brainstem and their functions.</p> <p>f. Locate and identify functions of eye and ear structures.</p> <p>g. Identify structures and describe the basic functions of the nervous system, e.g., cerebral, spinal cord, peripheral and autonomic nerves.</p> <p>h. Identify primary functions of the cerebral lobes.</p> <p>i. <b>Identify and explain the basic structure and functions of the circulatory system, e.g., heart, blood flow, atria, vena cava, arteries, veins, and capillaries.</b></p> <p>j. <b>Identify the location and describe the function of the respiratory system, e.g., upper airway, lower airway, and lungs during inhalation and exhalation.</b></p> <p>k. Identify, locate, and describe the function of the primary systems and structure of surface anatomy; identify anatomical body planes, cavities, and the organs in each plane.</p> <p>l. Identify signs and symptoms of respiratory distress or failure; identify signs of adequate oxygenation.</p>	<p><a href="#">B2.0</a></p> <p><a href="#">B2.1</a></p> <p><a href="#">B2.4</a></p> <p><a href="#">B5.0-7</a></p>	<p><a href="#">1</a></p> <p><a href="#">2</a></p>	<p><a href="#">2</a></p> <p><a href="#">11</a></p>	<p><a href="#">LS</a></p> <p><a href="#">9-10</a></p> <p><a href="#">11-12.6</a></p>	
12. Surveying the Scene	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<p>a. <b>Explain how to manage an incident scene as the first responder, using emergency response skills appropriate to training and certification.</b></p> <p>b. <b>Demonstrate the proper method for assessing a scene.</b></p> <p>c. Identify and demonstrate knowledge of occupational health and safety issues related to on-scene response for patients, families, and Emergency Medical Responders and methods of prevention.</p> <p>d. Demonstrate the approach best used when dealing with patients who are elderly, chronic-care patients, hearing or visually impaired, non-English speakers, developmentally disabled, or who display disruptive or aggressive behavior.</p> <p>e. Describe the role of the first responder when responding to special rescue situations such as water, ice, and confined space rescues.</p> <p>f. Describe the role of emergency medical responder in a multiple-casualty incident, the purpose of triage and the steps involved in the START triage system.</p> <p>g. Explain the purpose of prioritizing a client for care and transport.</p> <p>h. Explain the key principles and structure of an Incident Command System (ICS).</p> <p>i. Identify the difference between medical emergencies and non-emergencies.</p> <p>j. Describe the appropriate use of extraction.</p>	<p><a href="#">B4.0</a></p> <p><a href="#">B5.6</a></p> <p><a href="#">B9.1</a></p> <p><a href="#">B9.3</a></p> <p><a href="#">B10.2</a></p> <p><a href="#">B10.5</a></p> <p><a href="#">B11.4</a></p> <p><a href="#">B13.0</a></p> <p><a href="#">B13.3</a></p> <p><a href="#">B13.6</a></p>	<p><a href="#">1</a></p> <p><a href="#">2</a></p> <p><a href="#">5</a></p> <p><a href="#">7</a></p> <p><a href="#">8</a></p> <p><a href="#">9</a></p> <p><a href="#">12</a></p>	<p><a href="#">2</a></p> <p><a href="#">5</a></p> <p><a href="#">7</a></p> <p><a href="#">8</a></p> <p><a href="#">9</a></p> <p><a href="#">11</a></p>	<p><a href="#">LS</a></p> <p><a href="#">9-10</a></p> <p><a href="#">11-12.6</a></p> <p><a href="#">WS</a></p> <p><a href="#">11-12.7</a></p> <p><a href="#">SLS</a></p> <p><a href="#">9-10</a></p> <p><a href="#">11-12.1b</a></p> <p><a href="#">11-12.1d</a></p>	

13. Patient Assessment	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<p>a. <b>Demonstrate and explain the purpose for the proper steps of a primary and secondary patient assessment.</b></p> <p>b. <b>Differentiate between normal and abnormal vital signs.</b></p> <p>c. Demonstrate the procedures for assessing the airway, breathing, and circulation of an infant, child, and adult.</p> <p>d. Demonstrate the process used to check a patient’s responsiveness.</p> <p>e. Demonstrate the proper procedure for measuring and recording a patient’s temperature, pulse, and respiration rate.</p> <p>f. Demonstrate the proper procedure for measuring and recording a patient’s blood pressure, both digitally and manually.</p> <p>g. Demonstrate the proper procedure for measuring and recording a patient’s pain scale.</p> <p>h. Describe the components of an on-going patient assessment.</p> <p>i. Differentiate between a sign and a symptom.</p> <p>j. Explain the importance of obtaining a patient’s medical history.</p> <p>k. Identify the five vital signs and the body systems measured by each.</p> <p>l. Identify signs and symptoms of abuse.</p> <p>m. Identify concerns when assessing and treating geriatric patients.</p> <p>n. List the information that should be addressed in the hand-off report about the patient’s condition.</p>	<p><a href="#">B4.0</a> <a href="#">B4.1</a> <a href="#">B4.3</a> <a href="#">B4.4</a> <a href="#">B5.6</a> <a href="#">B6.0-4</a> <a href="#">B7.0-2</a> <a href="#">B10.4</a></p>	<p><a href="#">1</a> <a href="#">2</a> <a href="#">5</a> <a href="#">6</a> <a href="#">7</a> <a href="#">8</a> <a href="#">9</a> <a href="#">11</a> <a href="#">12</a></p>	<p><a href="#">2</a> <a href="#">5</a> <a href="#">6</a> <a href="#">7</a> <a href="#">8</a> <a href="#">9</a> <a href="#">11</a></p>	<p><a href="#">LS</a> <a href="#">9-10</a> <a href="#">11-12.6</a> <a href="#">WS</a> <a href="#">11-12.7</a>  <a href="#">RSTS</a> <a href="#">9-10</a> <a href="#">11-12.4</a>  <a href="#">SLS</a> <a href="#">11-12.1b</a> <a href="#">11-12.1d</a></p>	
14. Lifting and Moving Patients	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<p>a. <b>Describe the components of good body mechanics.</b></p> <p>b. <b>Demonstrate the procedures for moving patients with suspected spinal injuries.</b></p> <p>c. Demonstrate the steps needed to perform patient drags.</p> <p>d. Demonstrate various methods for carrying non-ambulatory patients.</p> <p>e. Demonstrate methods for performing walking assistance for ambulatory patients.</p> <p>f. Explain the purpose and indications for use of the recovery position.</p> <p>g. Utilize equipment commonly used in moving patients.</p>	<p><a href="#">B8.0-5</a> <a href="#">B10.4</a></p>	<p><a href="#">1</a> <a href="#">2</a> <a href="#">5</a></p>	<p><a href="#">2</a> <a href="#">5</a> <a href="#">11</a></p>	<p><a href="#">LS</a> <a href="#">9-10</a> <a href="#">11-12.6</a>  <a href="#">WS</a> <a href="#">11-12.7</a></p>	
15. Medical Emergencies	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<p>a. <b>Explain the causes, signs, symptoms, and treatment for: angina pectoris, heart attack, congestive heart failure, dyspnea, stroke, insulin shock, diabetic coma, abdominal pain, and a dialysis patient.</b></p> <p>b. <b>Explain the causes, symptoms, and treatment for patients with altered mental status, seizures, loss of consciousness, and heat and cold exposure.</b></p> <p>c. Identify the causes, signs, symptoms, and treatment of anaphylaxis.</p> <p>d. Identify causes, signs, symptoms, and treatment for common medical emergencies.</p>	<p><a href="#">B2.0</a> <a href="#">B2.1</a> <a href="#">B2.3</a> <a href="#">B2.4</a> <a href="#">B4.0</a> <a href="#">B4.4</a> <a href="#">B4.5</a> <a href="#">B5.6</a></p>	<p><a href="#">1</a> <a href="#">2</a> <a href="#">4</a> <a href="#">11</a></p>	<p><a href="#">2</a> <a href="#">4</a> <a href="#">11</a></p>	<p><a href="#">LS</a> <a href="#">9-10</a> <a href="#">11-12.6</a>  <a href="#">WS</a> <a href="#">11-12.6</a></p>	

<p>e. Identify causes, signs, symptoms, and treatment for patients who have been exposed to poison.</p> <p>f. Identify causes, signs, symptoms, and treatment for patients with possible drug overdoses.</p> <p>g. Identify causes, signs, symptoms, and treatment for common respiratory emergencies.</p>	<a href="#">B10.4</a>				
<b>16. Trauma Emergencies</b>	<b>CTE - PS</b>	<b>CRP</b>	<b>CTE - AS</b>	<b>CCSS</b>	<b>ISTE</b>
<p>a. Describe the causes, signs, symptoms, and treatment for common trauma emergencies.</p> <p>b. Demonstrate the emergency medical care used for a penetrating chest injury.</p> <p>c. List the signs, symptoms, and treatment for shock.</p> <p>d. Demonstrate emergency care for external bleeding.</p> <p>e. Explain the emergency medical treatment for various types and locations of wounds.</p> <p>f. Demonstrate the emergency medical care used for a patient with an impaled object.</p> <p>g. Demonstrate the emergency medical care used for amputation.</p> <p>h. Identify causes and treatment for various types of burns.</p> <p>i. Differentiate between arterial, venous, and capillary bleeding.</p> <p>j. List the signs, symptoms, and treatment for internal bleeding.</p> <p>k. Describe the emergency medical care used to treat a soft tissue injury.</p>	<p><a href="#">B2.0</a></p> <p><a href="#">B2.1</a></p> <p><a href="#">B2.3</a></p> <p><a href="#">B2.4</a></p> <p><a href="#">B4.0</a></p> <p><a href="#">B4.4</a></p> <p><a href="#">B4.5</a></p> <p><a href="#">B5.6</a></p> <p><a href="#">B10.4</a></p>	<p><u>1</u></p> <p><u>2</u></p> <p><u>5</u></p> <p><u>6</u></p> <p><u>9</u></p>	<p><u>2</u></p> <p><u>5</u></p> <p><u>6</u></p> <p><u>9</u></p> <p><u>11</u></p>	<p><a href="#">LS</a></p> <p><a href="#">9-10</a></p> <p><a href="#">11-12.6</a></p> <p><a href="#">WS</a></p> <p><a href="#">11-12.7</a></p> <p><a href="#">RSTS</a></p> <p><a href="#">9-10</a></p> <p><a href="#">11-12.4</a></p> <p><a href="#">SLS</a></p> <p><a href="#">11-12.1b</a></p>	
<b>17. Cardiovascular and Respiratory Emergencies</b>	<b>CTE - PS</b>	<b>CRP</b>	<b>CTE - AS</b>	<b>CCSS</b>	<b>ISTE</b>
<p>a. Describe the anatomy and function of the circulatory system.</p> <p>b. Distinguish the major structures and functions of the respiratory system.</p> <p>c. Describe common medical emergencies related to the cardiovascular system.</p> <p>d. Identify signs and symptoms of respiratory distress.</p> <p>e. Demonstrate proper rescue breathing techniques including, mouth to mask, mouth to the barrier, and bag valve mask (BVM).</p> <p>f. Demonstrate the appropriate use of supplemental oxygen.</p> <p>g. Explain the difference in signs and symptoms between a partial and complete airway obstruction.</p> <p>h. Perform the steps used in the removal of a foreign body airway obstruction in an infant, child, and adult.</p> <p>i. Identify differences in the respiratory systems of infants, children, and adults.</p> <p>j. Identify equipment commonly used for artificial ventilation.</p>	<p><a href="#">B2.0</a></p> <p><a href="#">B2.1</a></p> <p><a href="#">B2.3</a></p> <p><a href="#">B2.4</a></p> <p><a href="#">B4.0</a></p> <p><a href="#">B4.4</a></p> <p><a href="#">B4.5</a></p> <p><a href="#">B5.6</a></p> <p><a href="#">B10.4</a></p>	<p><u>1</u></p> <p><u>2</u></p> <p><u>5</u></p> <p><u>6</u></p> <p><u>9</u></p>	<p><u>2</u></p> <p><u>5</u></p> <p><u>6</u></p> <p><u>9</u></p> <p><u>11</u></p>	<p><a href="#">LS</a></p> <p><a href="#">9-10</a></p> <p><a href="#">11-12.6</a></p> <p><a href="#">WS</a></p> <p><a href="#">11-12.7</a></p> <p><a href="#">RSTS</a></p> <p><a href="#">9-10</a></p> <p><a href="#">11-12.4</a></p> <p><a href="#">SLS</a></p> <p><a href="#">11-12.1b</a></p>	
<b>18. Cardiopulmonary Resuscitation</b>	<b>CTE - PS</b>	<b>CRP</b>	<b>CTE - AS</b>	<b>CCSS</b>	<b>ISTE</b>
<p>a. Demonstrate the proper procedures used in one and two-person CPR for infants, children, and adults.</p> <p>b. Explain the importance of early access to an AED.</p>	<p><a href="#">B5.6</a></p> <p><a href="#">B10.4</a></p>	<p><u>1</u></p> <p><u>2</u></p> <p><u>5</u></p>	<p><u>2</u></p> <p><u>5</u></p> <p><u>6</u></p>	<p><a href="#">LS</a></p> <p><a href="#">9-10</a></p> <p><a href="#">11-12.6</a></p>	

<ul style="list-style-type: none"> <li>c. Pass a CPR exam with 83% or higher.</li> <li>d. List the links in the chain of survival.</li> <li>e. Demonstrate the procedures for using an AED.</li> <li>f. Identify common situations that may require the use of CPR.</li> <li>g. Discuss moral and legal implications for performing first aid and CPR.</li> </ul>		<u>6</u> <u>9</u>	<u>9</u> <u>11</u>	<u>WS</u> <u>11-12.7</u>  <u>RSTS</u> <u>9-10</u> <u>11-12.4</u>  <u>SLS</u> <u>11-12.1b</u>	
<b>19. Behavioral and Mental Health Emergencies</b>	<b>CTE - PS</b>	<b>CRP</b>	<b>CTE - AS</b>	<b>CCSS</b>	<b>ISTE</b>
<ul style="list-style-type: none"> <li>a. <b>Demonstrate safety precautions when dealing with potentially violent patients.</b></li> <li>b. <b>Identify techniques to safely restrain a patient with behavioral problems.</b></li> <li>c. Describe the principles for assessing patients experiencing a behavioral emergency.</li> <li>d. Define a 5150 and explain how it applies to patient care.</li> </ul>	<u>B5.6</u> <u>B10.4</u>	<u>1</u> <u>2</u> <u>5</u> <u>6</u>	<u>2</u> <u>5</u> <u>6</u> <u>11</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u>  <u>WS</u> <u>11-12.7</u>  <u>RSTS</u> <u>9-10</u> <u>11-12.4</u>	
<b>20. Musculoskeletal Injuries</b>	<b>CTE - PS</b>	<b>CRP</b>	<b>CTE - AS</b>	<b>CCSS</b>	<b>ISTE</b>
<ul style="list-style-type: none"> <li>a. <b>Describe the anatomy and function of the muscular system.</b></li> <li>b. <b>Describe the anatomy and function of the skeletal system.</b></li> <li>c. Demonstrate splinting techniques.</li> <li>d. Assess and treat a patient with a suspected spinal injury.</li> <li>e. Differentiate between a fracture, dislocation, and sprain.</li> <li>f. Evaluate the circulation, motor, sensory, and cap refill (CMSC) of a patient with an extremity injury.</li> <li>g. Demonstrate the assessment and management of a patient with a suspected head injury.</li> <li>h. Identify common causes and prevention for musculoskeletal injuries.</li> </ul>	<u>B2.0</u> <u>B2.1</u> <u>B2.3</u> <u>B2.4</u> <u>B4.0</u> <u>B4.4</u> <u>B4.5</u> <u>B5.6</u> <u>B10.4</u>	<u>1</u> <u>2</u> <u>5</u> <u>6</u> <u>9</u>	<u>2</u> <u>5</u> <u>6</u> <u>9</u> <u>11</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u>  <u>WS</u> <u>11-12.7</u>  <u>RSTS</u> <u>9-10</u> <u>11-12.4</u>  <u>SLS</u> <u>11-12.1b</u>	
<b>21. Childbirth</b>	<b>CTE - PS</b>	<b>CRP</b>	<b>CTE - AS</b>	<b>CCSS</b>	<b>ISTE</b>
<ul style="list-style-type: none"> <li>a. <b>Explain the stages of labor and delivery.</b></li> <li>b. <b>List the steps taken to prepare a pregnant woman for delivery.</b></li> <li>c. Describe the methods used to assist during childbirth.</li> </ul>	<u>B5.6</u> <u>B10.4</u>	<u>1</u> <u>2</u>	<u>2</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u>	

<p>d. Describe the necessary care of the mother and newborn pre- and post-delivery.</p> <p>e. Identify possible complications that can occur during childbirth.</p>					
<p><b>22. Pediatric Emergencies</b></p>	<p>CTE - PS</p>	<p>CRP</p>	<p>CTE - AS</p>	<p>CCSS</p>	<p>ISTE</p>
<p>a. <b>Identify common pediatric emergencies.</b></p> <p>b. <b>Describe methods used for cooling an infant and child with a high fever.</b></p> <p>c. Identify methods to prevent pediatric emergencies and injuries.</p> <p>d. Explain the steps that should be taken to care for a child who has signs of abuse or sexual assault.</p> <p>e. Demonstrate how to determine an infant's and child's pulse rate, respiratory rate, and body temperature.</p>	<p><a href="#">B2.0</a></p> <p><a href="#">B2.1</a></p> <p><a href="#">B2.3</a></p> <p><a href="#">B2.4</a></p> <p><a href="#">B4.0</a></p> <p><a href="#">B4.4</a></p> <p><a href="#">B4.5</a></p> <p><a href="#">B5.6</a></p> <p><a href="#">B10.4</a></p>	<p><u>1</u></p> <p><u>2</u></p> <p><u>5</u></p> <p><u>6</u></p> <p><u>9</u></p> <p><u>9</u></p>	<p><u>2</u></p> <p><u>5</u></p> <p><u>6</u></p> <p><u>9</u></p> <p><u>11</u></p>	<p><a href="#">LS</a></p> <p><a href="#">9-10</a></p> <p><a href="#">11-12.6</a></p> <p><a href="#">WS</a></p> <p><a href="#">11-12.7</a></p> <p><a href="#">RSTS</a></p> <p><a href="#">9-10</a></p> <p><a href="#">11-12.4</a></p> <p><a href="#">SLS</a></p> <p><a href="#">11-12.1b</a></p>	
<p><b>23. Environmental Emergencies</b></p>	<p>CTE - PS</p>	<p>CRP</p>	<p>CTE - AS</p>	<p>CCSS</p>	<p>ISTE</p>
<p>a. <b>Identify the signs, symptoms, and treatment of various environmental emergencies.</b></p> <p>b. <b>Identify the signs, symptoms, and treatment of common bites and stings.</b></p> <p>c. Identify the signs, symptoms, and treatment of cold exposure.</p> <p>d. Identify the signs, symptoms, and treatment of heat exposure.</p> <p>e. Identify the signs, symptoms, and treatment of drowning or near-drowning.</p>	<p><a href="#">B5.6</a></p> <p><a href="#">B10.4</a></p>	<p><u>1</u></p> <p><u>2</u></p>	<p><u>2</u></p>	<p><a href="#">LS</a></p> <p><a href="#">9-10</a></p> <p><a href="#">11-12.6</a></p>	

<b>A-G Approved Key Assignments</b>	
1.	Students will research Internet sites that provide information related to the evolution and history of Emergency Medical Services and write a 300-word essay on the history of Emergency Medical Services. <i>Unit(s) 7</i>
2.	Students will research Internet sites that provide information on the benefits of Emergency Medical Services and create a brochure that includes five of the benefits of EMS and prepare a class presentation. <i>Unit(s) 7, 8</i>
3.	Students will research the responsibilities, wages, and education required to be an emergency responder then write a 2-3-page paper discussing their research and describe their thoughts regarding a career in the industry. <i>Unit(s) 7, 8, 9</i>
4.	Students will participate in mock interviews that represent current industry practices (e.g., skills demonstrations, resumes, applications, portfolios, personal websites, etc.). <i>Unit(s) 8</i>
5.	Students will research the legal and ethical implications of decisions made in patient care and debate those decisions based on how a medical provider or patient's personal belief system may impact the patient. <i>Unit(s) 9</i>
6.	Students will accurately complete medical reports and documentation for various medical and/or trauma situations. <i>Unit(s) 10, 11, 13</i>
7.	Working in groups, students will create a large poster based on a specified body system provided by the instructor highlighting all the major organs and functions of each body system followed by a presentation of their poster to the class. Students will take turns quizzing each other of the terminology of the human body. <i>Unit(s) 11</i>
8.	Students will demonstrate the proper procedures as a first responder in securing a crime scene, including the preservation of evidence, patient care, and documentation. <i>Unit(s) 8-23</i>
9.	Students will demonstrate the proper procedures for patient care, documentation, and scene surveillance in a mock emergency that includes various degrees of medical distress and/or trauma. <i>Unit(s) 8-23</i>
10.	Students will demonstrate their ability to move a patient from a mock emergency scene to the designated care area then write a summary of the experience describing how the patient's condition indicated the type of transport the student used. <i>Unit(s) 7</i>
11.	Write a 300-word summary of the general considerations required to move patients safely without causing them further harm while simultaneously protecting the First Responder from injury. <i>Unit(s) 7</i>
12.	In small groups, students will design a mock emergency that includes various degrees of medical distress and/or trauma. The groups will then demonstrate the proper procedures for patient care, documentation, and scene surveillance for another group's scenario. <i>Unit(s) 7-23</i>
13.	Write a 1-page essay on a type of shock with the signs and symptoms and with an example of how it will affect the patient and list the treatment guidelines. <i>Unit(s) 9</i>
14.	Identify and demonstrate the procedures to stabilize and immobilize injuries to muscles and bones. <i>Unit(s) 20</i>
15.	Create an informational graphic document describing the recovery techniques and resuscitation efforts First Responder may need to follow when managing a patient who has been involved in a submersion or other cardiovascular and respiratory emergency incident. <i>Unit(s) 18</i>
16.	Students will demonstrate the skills necessary to complete the National Registry Emergency Medical Responder/EMT skills sheets through participation in multiple scenarios. <i>Unit(s) 7-23</i>
17.	Write a 250-word essay on Post traumatic stress disorder, include signs and symptoms, and presented it to the classroom. <i>Unit(s) 19</i>
18.	Students will respond to multiple victim accidents that include patients of varying ages and medical conditions, including pregnancy and pediatric scenarios. <i>Unit(s) 7-23</i>
19.	Write a 300-word essay describing the assessment and management of gynecological emergencies and list the three stages of labor. <i>Unit(s) 14</i>

## **Standards Alignment**

The curricula have been aligned with the CTE Model Curriculum Standards released in 2013. Each industry sector was updated to meet the increased rigor and relevancy requirements of the Common Core State Standards. The curriculum also includes the new Standards for Career Ready Practices.

### Standards for Career Ready Practice

1. *Apply appropriate technical skills and academic knowledge.*
2. *Communicate clearly, effectively, and with reason.*
3. *Develop an education and career plan aligned with personal goals.*
4. *Apply technology to enhance productivity.*
5. *Utilize critical thinking to make sense of problems and persevere in solving them.*
6. *Practice personal health and understand financial literacy.*
7. *Act as a responsible citizen in the workplace and the community.*
8. *Model integrity, ethical leadership, and effective management.*
9. *Work productively in teams while integrating cultural and global competence.*
10. *Demonstrate creativity and innovation.*
11. *Employ valid and reliable research strategies.*
12. *Understand the environmental, social, and economic impacts of decisions.*

## CTE Anchor Standards—Common Core English Language Arts Alignment

### *Anchor Standard 1: Academics*

Analyze and apply appropriate academic standards required for successful industry sector pathway completion leading to postsecondary education and employment. Refer to the industry sector alignment matrix for identification of standards. Note: alignment listed within each sector.

### *Anchor Standard 2: Communications*

Language Standard: Acquire and accurately use general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the (career and college) readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. LS 9-10, 11-12.6

### *Anchor Standard 3: Career Planning and Management*

Speaking and Listening Standard: Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. SLS 11-12.2

### *Anchor Standard 4: Technology*

Writing Standard: Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments and information.

### *Anchor Standard 5: Problem Solving and Critical Thinking*

Writing Standard: Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem, narrow, or broaden the inquiry when appropriate, and synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. WS 11-12.7

### *Anchor Standard 6: Health and Safety*

Reading Standards for Science and Technical Subjects: Determine the meaning of symbols, keywords, and other domain-specific words and phrases as they are used in a specific scientific or technical context. RSTS 9-10, 11-12.4

### *Anchor Standard 7: Responsibility and Flexibility*

Speaking and Listening Standard: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners, building on others' ideas and expressing their own clearly and persuasively. SLS 9-10, 11-12.1

### *Anchor Standard 8: Ethics and Legal Responsibilities*

Speaking and Listening Standard: Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the work. SLS 11-12.1d

### *Anchor Standard 9: Leadership and Teamwork*

Speaking and Listening Standard: Work with peers to promote civil, democratic discussions and decision making; set clear goals and deadlines; and establish individual roles as needed. SLS 11-12.1b

### *Anchor Standard 10: Technical Knowledge and Skills*

Writing Standard: Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information. WS 11-12.6

### *Anchor Standard 11: Demonstration and Application*

Demonstrate and apply the knowledge and skills contained in the industry-sector anchor standards, pathway standards, and performance indicators in the classroom, laboratory, and workplace settings, and the career technical student organization. Note: no alignment evident for this standard. WS 11-12.6

## CTE Model Curriculum Standards—Industry Sectors and Pathways

### **Health Science and Medical Technology**

#### **C. Patient Care**

- B2.0 *Understand the basic structure and function of the human body and relate normal function to common disorders.*
- B2.1 *Know basic human body structure and function in relationship to specific care between prevention, diagnosis, pathology, and treatment.*
- B2.3 *Recognize common disease and disorders of the human body.*
- B2.4 *Compare normal function of the human body to the diagnosis and treatment of disease and disorders.*
- B4.0 *Recognize and practice components of an intake assessment relevant to patient care.*
- B4.1 *Conduct basic interview to acquire new knowledge (e.g., medical and family histories).*
- B4.3 *Observe patient actions, interests, and behaviors while documenting responses.*
- B4.4 *Collect and synthesize information or data about the patient’s symptoms and vital signs.*
- B4.5 *Evaluate information gathered and connect patient data to appropriate system of care.*
- B5.0 *Know the definition, spelling, pronunciation, and use of appropriate terminology in the health care setting.*
- B5.1 *Use medical terminology in patient care appropriate to communicate information and observations.*
- B5.2 *Accurately spell and define occupationally specific terms related to health care.*
- B5.3 *Use roots, prefixes, and suffixes to communicate information.*
- B5.4 *Use medical abbreviations to communicate information.*
- B5.5 *Know the basic structure of medical terms.*
- B5.6 *Demonstrate the correct pronunciation of medical terms.*
- B5.7 *Practice word building medical terminology skills.*
- B6.0 *Communicate procedures and goals to patients using various communication strategies to respond to questions and concerns.*
- B6.1 *Observe and document the ability of patients to comprehend and understand procedures and determine how to adjust communication techniques.*
- B6.2 *Use active listening skills (e.g., reflection, restatement, and clarification) and communication techniques to gather information from the patient.*
- B6.3 *Formulate appropriate responses to address the patients concerns and questions in a positive manner.*
- B6.4 *Employ sensitivity and withhold bias when communicating with patients.*
- B6.6 *Maintain written guidelines of the Health Insurance Portability and Accountability Act (HIPAA) in all communications.*
- B7.0 *Apply observation techniques to detect changes in the health status of patients.*
- B7.1 *Demonstrate observation techniques.*
- B7.2 *Differentiate between normal and abnormal patient health status.*
- B7.3 *Document the patient findings and report information appropriately.*
- B7.4 *Plan basic care procedures within the scope of practice to assist with patient comfort.*
- B8.0 *Demonstrate the principles of body mechanics as they apply to the positioning, transferring, and transporting of patients.*
- B8.1 *Explain the principles of body mechanics.*
- B8.2 *Determine appropriate equipment for transportation and transfer, including the modification of equipment and techniques to accommodate the health status of the patient.*

- B8.3 Demonstrate appropriate transport and transfer methods to accommodate the health status of the patient.*
- B8.4 Evaluate equipment for possible hazards.*
- B8.5 Integrate proper body mechanics, ergonomics, safety equipment, and techniques to prevent personal injury to patients and clients.*
- B9.1 Know and implement practices to prevent injury and protect health for self and others.*
- B9.3 Identify practices to prevent injuries and protect health, for self and others (i.e., seatbelts, helmets, and body mechanics).*
- B10.0 Comply with protocols and preventative health practices necessary to maintain a safe and healthy environment for patients, health care workers, coworkers, and self within the health care setting.*
- B10.2 Demonstrate use of facility policies and procedures of infection control while performing patient care.*
- B10.4 Demonstrate the use of appropriate personal protective equipment (PPE).*
- B10.5 Practice proper hand hygiene.*
- B11.4 Apply protective practices and procedure for airborne and blood-borne pathogens for equipment and facilities and identify unsafe conditions for corrective action.*
- B13.0 Research factors that define cultural differences between and among different ethnic, racial, and cultural groups and special populations.*
- B13.1 Utilize culturally appropriate community resources.*
- B13.3 Develop ethnographic skills, by location and information retrieval, carefully observe social behavior and manage stress and time.*
- B13.6 Know when and how to incorporate trained interpreters to facilitate communication and improve patient outcomes.*

## ISTE Standards for Students

**1. Empowered Learner-** Students leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.

- a) Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them, and reflect on the learning process itself to improve learning outcomes.*
- b) Students build networks and customize their learning environments in ways that support the learning process.*
- c) Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways*
- d) Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.*

**2. Digital Citizen-** Students recognize the rights, responsibilities, and opportunities of living, learning, and working in an interconnected digital world, and they act and model in ways that are safe, legal, and ethical.

- a) Students cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.*
- b) Students engage in positive, safe, legal, and ethical behavior when using technology, including social interactions online or when using networked devices.*
- c) Students demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.*
- d) Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.*

**3. Knowledge Constructor-** Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts, and make meaningful learning experiences for themselves and others.

- a) Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.*
- b) Students evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources.*
- c) Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.*
- d) Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories, and pursuing answers and solutions.*

**4. Innovative Designer-** Students use a variety of technologies within a design process to identify and solve problems creating new, useful, or imaginative solutions.

- a) Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems.*
- b) Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.*
- c) Students develop, test, and refine prototypes as part of a cyclical design process.*
- d) Students exhibit a tolerance for ambiguity, perseverance, and the capacity to work with open-ended problems.*

**5. Computational Thinker-** Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.

- a) Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models, and algorithmic thinking in exploring and finding solutions.*
- b) Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.*

*c) Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.*

*d) Students understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.*

**6. Creative Communicator-** Students communicate clearly and express themselves creatively for a variety of purposes using platforms, tools, styles, formats, and digital media appropriate for their goals.

*a) Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.*

*b) Students create original works or responsibly repurpose or remix digital resources into new creations.*

*c) Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models, or simulations.*

*d) Students publish or present content that customizes the message and medium for their intended audiences.*

**7. Global Collaborator-** Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.

*a) Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.*

*b) Students use collaborative technologies to work with others, including peers, experts, or community members, to examine issues and problems from multiple viewpoints.*

*c) Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.*

*d) Students explore local and global issues and use collaborative technologies to work with others to investigate solutions.*