

Vermont Career Technical Education (CTE) Program Critical Proficiencies

Health Science and Dental Assisting CTE Programs

The Critical Proficiencies identify the essential knowledge, skills, and abilities that VT CTE students need to demonstrate (1) to be program completers, and (2) to be prepared for future learning. Critical proficiencies promote high expectations for all students, and support students' personal, professional, and academic development. At the high school level, VT's Proficiency-Based Graduation Requirements (PBGRs) reflect the critical proficiencies that lead to postsecondary career and college readiness.

For each of the unique program areas which categorize VT's CTE programs, the proficiency template includes:

- Program-Area Descriptions
- Career Ready Practices
- Career Cluster(s) and Pathway(s)
- Anchor Standards
- Program Technical Standards
- Academic Alignment
- CTE Program Elements

Advance CTE Common Career Technical Core - Career Ready Practices

The Common Career Technical Core (CCTC) is a state-led initiative to establish a set of rigorous, high-quality standards for Career Technical Education (CTE). The CCTC includes a set of standards for each Career Cluster® and corresponding Career Pathways that define what students should know and be able to do after completing instruction in a program of study. The CCTC also includes an overarching set of Career Ready Practices that apply to all programs of study. The Career Ready Practices include statements that address the knowledge, skills, and dispositions that are important to becoming career ready.

The Career Ready Practices were developed from a state-led initiative sponsored by the National Association of State Directors of Career Technical Education Consortium (NASDCTEC).

Career Ready Practices describe the career-ready skills that educators should seek to develop in their students. These practices are not exclusive to a Career Pathway, program of study, discipline, or level of education. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study. (NASDCTEC, 2012)

The Career Ready Practices

- are applicable across all program areas.
- align with the VT Transferable Skills Proficiency-Based Graduation Requirements (PBGRs) and VT Portrait of a Graduate.
- are the *transferable skills* of the Common Career Technical Core and the *portrait* of a VT CTE program completer.

Advance CTE Common Career Technical Core - Career Cluster and Pathway Standards

The Common Career Technical Core is divided into Career Cluster and Pathway standards. Each Career Cluster contains one or more pathways with pathway-specific technical standards. The template shows which CCTC Career Cluster and Pathway standards are relevant to VT CTE programs.

Anchor Standards

The Anchor Standards build upon the Career Ready Practices and show the overarching standards categories which are common across all technical programs within their Career Cluster(s) and Pathway(s). The VT CTE Anchor Standards are derived from and align with the CCTC Anchor Standards.

Program Technical Standards

The Program Technical Standards build on and continue the Anchor Standards with more complexity, rigor, and career specificity. Knowledge and skills are learned and applied within a standards-based CTE program that integrates classroom, laboratory, and work-based instruction. The VT CTE Program Technical Standards are tailored to the unique characteristics and structure of each of the program areas.

Academic Alignment

Each program-area template includes academic alignment with the VT Content-Area Sample Graduation Proficiencies as part of VT's Proficiency-Based Graduation Requirements (PBGRs). These include Common Core State Standards in English Language Arts and Mathematics, Next Generation Science Standards, as well as other adopted national and state academic standards.

CTE Critical Proficiency Template

Critical Proficiency Template:	Attributes:
Program-Area Descriptions	For VT CTE Program Areas
Common Career Technical Core - Career Ready Practices	<ol style="list-style-type: none"> 1. Act as a responsible and contributing citizen and employee. 2. Apply appropriate academic and technical skills. 3. Attend to personal health and financial well-being. 4. Communicate clearly and effectively and with reason. 5. Consider the environmental, social, and economic impacts of decisions. 6. Demonstrate creativity and innovation. 7. Employ valid and reliable research strategies. 8. Utilize critical thinking to make sense of problems and persevere in solving them. 9. Model integrity, ethical leadership, and effective management. 10. Plan education and career paths aligned to personal goals. 11. Use technology to enhance productivity. 12. Work productively in teams while using cultural global competence.
Common Career Technical Core - Career Cluster(s) and Pathway(s)	Relevant to VT CTE Program Areas
Anchor Standards	<ol style="list-style-type: none"> 1. Academics 2. Communication 3. Problem Solving and Critical Thinking 4. Technology 5. Systems (Responsibility and Flexibility) 6. Health and Safety 7. Leadership and Teamwork 8. Ethics and Legal Responsibilities 9. Career Planning and Management 10. Technical Knowledge and Skills (see Program Technical Standards) 11. Demonstration and Application (see CTE Program Elements)
Program Technical Standards	Build on the Anchor Standards with more complexity, rigor, and career specificity

Critical Proficiency Template:	Attributes:
Academic Alignment	With VT Content-Area Graduation Proficiencies
CTE Program Elements	Demonstration and application: <ul style="list-style-type: none"> ● Dual Enrollment/Fast Forward Courses ● Industry Recognized Credentials (IRCs) ● Work-Based Learning/Co-op/Apprenticeship ● National Career Technical Student Organizations ● Entrepreneurship ● Portfolio/Personalized Learning Plan

VT Health Science, Dental Assisting CTE Programs

Students in **Health Science** programs have in-depth, hands-on experiences in functions involved in the prevention, treatment, and management of illness and the preservation of mental and physical well-being through the services offered by the medical and allied health professions.

Students in **Dental Assisting** programs have in-depth, hands-on experiences in dental anatomy, dental disease processes, and treatment; and procedures utilized in the dental office during the practice of dentistry.

The standards in this program area are designed to prepare students for technical training, postsecondary education, and/or entry-level employment in health care. Students engage in an instructional program that integrates academic and technical preparation, career exploration, and preparation for postsecondary education and/or training. Knowledge and skills are learned and applied within a standards-based CTE program that integrates classroom, laboratory, and work-based instruction.

Advance CTE Common Career Technical Core - Career Ready Practices

<p>Advance CTE Common Career Technical Core - Career Ready Practices:</p>	<p>Aligned with VT Transferable Skills Proficiency-Based Graduation Requirements (PBGRs) and VT Portrait of a Graduate</p>
<p>1. Act as a responsible and contributing citizen and employee.</p>	<p>Career-ready individuals understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community, and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.</p>
<p>2. Apply appropriate academic and technical skills.</p>	<p>Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.</p>
<p>3. Attend to personal health and financial well-being.</p>	<p>Career-ready individuals understand the relationship between personal health, workplace performance, and personal well-being; they act on that understanding to regularly practice healthy diet, exercise, and mental health activities. Career-ready individuals also take regular action to contribute to their personal financial wellbeing, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success.</p>

<p>Advance CTE Common Career Technical Core - Career Ready Practices:</p>	<p>Aligned with VT Transferable Skills Proficiency-Based Graduation Requirements (PBGRs) and VT Portrait of a Graduate</p>
<p>4. Communicate clearly and effectively and with reason.</p>	<p>Career-ready individuals communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others' time. They are excellent writers; they master conventions, word choice, and organization, and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.</p>
<p>5. Consider the environmental, social, and economic impacts of decisions.</p>	<p>Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment, and the profitability of the organization.</p>
<p>6. Demonstrate creativity and innovation.</p>	<p>Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.</p>
<p>7. Employ valid and reliable research strategies.</p>	<p>Career-ready individuals are discerning in accepting and using new information to make decisions, change practices, or inform strategies. They use reliable research processes to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices in their workplace situation.</p>

<p>Advance CTE Common Career Technical Core - Career Ready Practices:</p>	<p>Aligned with VT Transferable Skills Proficiency-Based Graduation Requirements (PBGRs) and VT Portrait of a Graduate</p>
<p>8. Utilize critical thinking to make sense of problems and persevere in solving them.</p>	<p>Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.</p>
<p>9. Model integrity, ethical leadership, and effective management.</p>	<p>Career-ready individuals consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes, and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals, and organizational culture.</p>
<p>10. Plan education and career paths aligned to personal goals.</p>	<p>Career-ready individuals take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience, and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals.</p>

Advance CTE Common Career Technical Core - Career Ready Practices:	Aligned with VT Transferable Skills Proficiency-Based Graduation Requirements (PBGRs) and VT Portrait of a Graduate
11. Use technology to enhance productivity.	Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks - personal and organizational - of technology applications, and they take actions to prevent or mitigate these risks.
12. Work productively in teams while using cultural global competence.	Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.

Advance CTE Common Career Technical Core - [Health Science](#) Career Cluster and Pathway Standards

The following Career Cluster and Pathway standards are relevant to VT Health Science, Dental Assisting CTE programs:	This Career Cluster® is focused on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
VT Health Science CTE Programs:	
Health Science Career Cluster	<ol style="list-style-type: none"> 1. Determine academic subject matter, in addition to high school graduation requirements, necessary for pursuing a health science career. 2. Explain the healthcare worker’s role within their department, their organization, and the overall healthcare system. 3. Identify existing and potential hazards to clients, coworkers, visitors, and self in the healthcare workplace. 4. Evaluate the roles and responsibilities of individual members as part of the healthcare team and explain their role in promoting the delivery of quality health care. 5. Analyze the legal and ethical responsibilities, limitations, and implications of actions within the healthcare workplace.

<p>The following Career Cluster and Pathway standards are relevant to VT Health Science, Dental Assisting CTE programs:</p>	<p>This Career Cluster® is focused on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.</p>
	<p>6. Evaluate accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare workplace.</p>
<p>Diagnostic Services Pathway</p>	<ol style="list-style-type: none"> 1. Communicate key diagnostic information to healthcare workers and patients/clients in an accurate and timely manner. 2. Assess and report patient's/client's health status in order to monitor and document patient/client progress. 3. Demonstrate the principles of body mechanics for positioning, transferring, and transporting of patients/clients, and perform them without injury to the patient/client or self. 4. Explain procedures and goals to the patient/client accurately and effectively, using strategies to respond to questions and concerns. 5. Select, demonstrate and interpret diagnostic procedures.
<p>Health Informatics Pathway</p>	<ol style="list-style-type: none"> 1. Communicate health information accurately and within legal and regulatory guidelines, upholding the strictest standards of confidentiality. 2. Describe the content and diverse uses of health information. 3. Demonstrate the use of systems used to capture, retrieve, and maintain confidential health information from internal and external sources.
<p>Support Services Pathway</p>	<ol style="list-style-type: none"> 1. Describe, differentiate, and safely perform the responsibilities of healthcare support service roles. 2. Demonstrate work practices that maintain a clean and healthy healthcare facility to reduce or eliminate pathogenic organisms. 3. Follow established internal and external guidelines in order to provide high-quality, effective support services in the healthcare facility. 4. Maximize available resources for proper care and use of healthcare equipment and materials.
<p>Therapeutic Services Pathway</p>	<ol style="list-style-type: none"> 1. Utilize communication strategies to answer patient/client questions and concerns on planned procedures and goals.

<p>The following Career Cluster and Pathway standards are relevant to VT Health Science, Dental Assisting CTE programs:</p>	<p>This Career Cluster® is focused on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.</p>
	<ol style="list-style-type: none"> 2. Communicate patient/client information among healthcare team members to facilitate a team approach to patient care. 3. Utilize processes for assessing, monitoring, and reporting patient's/client's health status to the treatment team within protocol and scope of practice. 4. Evaluate patient/client needs, strengths, and problems in order to determine if treatment goals are being met.
<p>VT Dental Assisting CTE Programs:</p>	
<p>Diagnostic Services Pathway</p>	<ol style="list-style-type: none"> 1. Explain procedures and goals to the patient/client accurately and effectively, using strategies to respond to questions and concerns.
<p>Health Informatics Pathway</p>	<ol style="list-style-type: none"> 1. Communicate health information accurately and within legal and regulatory guidelines, upholding the strictest standards of confidentiality. 2. Demonstrate the use of systems used to capture, retrieve, and maintain confidential health information from internal and external sources.
<p>Support Services Pathway</p>	<ol style="list-style-type: none"> 1. Describe, differential, and safely perform the responsibilities of healthcare support service roles. 2. Demonstrate work practices that maintain a clean and healthy healthcare facility to reduce or eliminate pathogenic organisms. 3. Follow established internal and external guidelines in order to provide high-quality, effective support services in the healthcare facility. 4. Maximize available resources for proper care and use of healthcare equipment and materials. 5. Implement healthcare facility standards in order to maintain high-quality healthcare facilities.
<p>Therapeutic Services Pathway</p>	<ol style="list-style-type: none"> 1. Utilize communication strategies to answer patient/client questions and concerns on planned procedures and goals. 2. Communicate patient/client information among healthcare team members to facilitate a team approach to

<p>The following Career Cluster and Pathway standards are relevant to VT Health Science, Dental Assisting CTE programs:</p>	<p>This Career Cluster® is focused on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.</p>
	<p>patient care.</p>

VT CTE Program Anchor Standards

<p>Anchor Standards:</p>	<p>Aligned with Advance CTE Common Career Technical Core - Career Cluster Anchor Standards</p>
<p>1. Academics</p>	<p>Achieve additional academic knowledge and skills required to pursue the full-range of career and postsecondary education opportunities.</p>
<p>2. Communication</p>	<p>Acquire and accurately use terminology and information at the career and college readiness level for communicating effectively in oral, written, and multimedia formats.</p>
<p>3. Problem Solving and Critical Thinking</p>	<p>Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem using critical and creative thinking; logical reasoning, analysis, inquiry, and problem-solving techniques.</p>
<p>4. Technology</p>	<p>Use existing and emerging technology to investigate, research, and produce products and services, including new information, as required in the workplace environment.</p>
<p>5. Systems (Responsibility and Flexibility)</p>	<p>Initiate, and participate in, a range of collaborations to demonstrate behaviors that reflect personal and professional responsibility, flexibility, and respect in the workplace environment and community settings.</p>
<p>6. Health and Safety</p>	<p>Demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms, and domain-specific words and phrases as related to the workplace environment.</p>
<p>7. Leadership and Teamwork</p>	<p>Work with peers to promote divergent and creative perspectives, effective leadership, group dynamics, team and individual decision making, benefits of workforce diversity, and conflict resolution.</p>
<p>8. Ethics and Legal</p>	<p>Practice professional, ethical, and legal behavior, responding</p>

Anchor Standards:	Aligned with Advance CTE Common Career Technical Core - Career Cluster Anchor Standards
Responsibilities	thoughtfully to diverse perspectives and resolving contradictions when possible, consistent with applicable laws, regulations, and organizational norms.
9. Career Planning and Management	Integrate multiple sources of career information from diverse formats to make informed career decisions, solve problems, and manage personal career plans.
10. Technical Knowledge and Skills (see Program Technical Standards)	Apply essential technical knowledge and skills common to the Career Cluster and Pathway(s), following procedures when carrying out experiments and/or performing technical tasks.
11. Demonstration and Application (see CTE Program Elements)	Demonstrate and apply technical knowledge and skills across a variety of CTE-specific opportunities in classroom, laboratory, and workplace settings.

VT Health Science CTE Program Technical Standards

Program Technical Standards: National Health Science Standards (NCHSE)	Standards for each career path build on and continue the Anchor Standards with more complexity, rigor, and career specificity.
1. Academic Foundations	<ul style="list-style-type: none"> a. Describe the organization of the human body and directional terms. b. Identify basic structures and describe functions of human body systems. c. Explain basic human growth and development concepts. d. Describe etiology, pathology, diagnosis, treatment, and prevention of common diseases and disorders. e. Describe biomedical therapies as they relate to the prevention, pathology, and treatment of disease. f. Demonstrate competency using basic math skills and mathematical conversions as they relate to healthcare. g. Demonstrate the ability to analyze diagrams, charts, graphs, and tables to interpret healthcare results. h. Demonstrate use of the 24-hour clock/military time.

<p>Program Technical Standards:</p> <p>National Health Science Standards (NCHSE)</p>	<p>Standards for each career path build on and continue the Anchor Standards with more complexity, rigor, and career specificity.</p>
<p>2. Communication</p>	<ul style="list-style-type: none"> a. Model verbal and nonverbal therapeutic communication. b. Identify common barriers to communication. c. Distinguish between subjective and objective information. d. Interpret elements of communication using sender-message-receiver feedback model. e. Modify communication to meet the needs of the patient/client and be appropriate to the situation. f. Describe appropriate interactions with patients throughout various stages of psychosocial development. g. Use common roots, prefixes, and suffixes essential to medical terminology to communicate information. h. Interpret common medical abbreviations to communicate information. i. Use proper elements of written and electronic communication (spelling, grammar, and formatting). j. Prepare examples of technical and informative writing. k. Demonstrate appropriate use of digital communication in a work environment, such as email, text, and social media.
<p>3. Systems</p>	<ul style="list-style-type: none"> a. Differentiate healthcare delivery systems and healthcare related agencies. b. Examine the healthcare consumer's rights and responsibilities within the healthcare system. c. Analyze the impact of emerging issues on healthcare delivery systems. d. Analyze healthcare economics and related terms.

<p>Program Technical Standards:</p> <p>National Health Science Standards (NCHSE)</p>	<p>Standards for each career path build on and continue the Anchor Standards with more complexity, rigor, and career specificity.</p>
<p>4. Employability Skills</p>	<ul style="list-style-type: none"> a. Identify personal traits and attitudes desirable in a career ready member of a health team. b. Summarize professional standards as they apply to hygiene, dress, language, confidentiality, and behavior. c. Apply employability skills in healthcare. d. Research levels of education, credentialing requirements, and employment trends in health professions to make career decisions. e. Distinguish differences among careers within a health science pathway. f. Develop components of a personal portfolio. g. Identify strategies for pursuing employment.
<p>5. Legal Responsibilities</p>	<ul style="list-style-type: none"> a. Analyze legal responsibilities and implications of criminal and civil law in healthcare. b. Apply standards for the safety, privacy, and confidentiality of health information. c. Describe advance directives. d. Summarize the essential characteristics of a patient's basic rights within a healthcare setting. e. Differentiate informed and implied consent. f. Explain laws governing harassment. g. Describe the concept of scope of practice. h. Utilize procedures for reporting activities and behaviors that affect the health, safety, and welfare of others (incident report).
<p>6. Ethics</p>	<ul style="list-style-type: none"> a. Differentiate between ethical and legal issues impacting healthcare. b. Identify ethical issues and their implications related to healthcare. c. Discuss religious and cultural values as they impact healthcare. d. Demonstrate respectful and empathetic treatment of all patients/clients.

<p>Program Technical Standards:</p> <p>National Health Science Standards (NCHSE)</p>	<p>Standards for each career path build on and continue the Anchor Standards with more complexity, rigor, and career specificity.</p>
<p>7. Safety Practices</p>	<ul style="list-style-type: none"> a. Explain principles of infection transmission. b. Differentiate methods of controlling the spread and growth of pathogens. c. Apply personal safety procedures based on Occupational Safety and Health Administration (OSHA) and Centers for Disease Control (CDC) regulations. d. Demonstrate principles of body mechanics during patient care. e. Demonstrate and apply the use of personal protective equipment (PPE). f. Apply safety techniques in the work environment. g. Observe all safety standards related to the occupational exposure to hazardous chemicals standard (safety data sheets [SDS]). h. Comply with safety signs, symbols, and labels. i. Practice fire safety in a healthcare setting. j. Apply principles of basic emergency response in natural disasters and other emergencies (safe location, contact emergency personnel, follow facility protocols).
<p>8. Teamwork</p>	<ul style="list-style-type: none"> a. Evaluate roles and responsibilities of healthcare team members. b. Identify characteristics of effective teams. c. Recognize methods for building positive team relationships. d. Analyze attributes and attitudes of an effective leader. e. Apply effective techniques for managing team conflict. f. Evaluate why teamwork is an important part of healthcare and how it improves patient care.

<p>Program Technical Standards:</p> <p>National Health Science Standards (NCHSE)</p>	<p>Standards for each career path build on and continue the Anchor Standards with more complexity, rigor, and career specificity.</p>
<p>9. Health Maintenance Practices</p>	<ul style="list-style-type: none"> a. Promote behaviors of health and wellness. b. Examine various aspects of behavioral health. c. Describe strategies for prevention of disease. d. Investigate complementary and alternative health practices as they relate to wellness and disease prevention. e. Discuss physical, mental, social, and behavioral development and its impact on healthcare.
<p>10. Technical Skills</p>	<ul style="list-style-type: none"> a. Demonstrate procedures for measuring and recording vital signs including the normal ranges. b. Obtain training or certification in • Automated external defibrillator (AED) • Cardiopulmonary resuscitation (CPR) • First aid • Foreign body airway obstruction (FBAO)
<p>11. Information Technology in Healthcare</p>	<ul style="list-style-type: none"> a. Identify components of an electronic health record (EHR) and/or electronic medical record (EMR). b. Explore different types of health data collection tools. c. Create electronic documentation that reflects timeliness, completeness, and accuracy. d. Adhere to information systems policies, procedures, and regulations as required by national, state, and local entities.

VT Dental Assisting CTE Program Technical Standards

<p>Program Technical Standards:</p>	<p>Standards for each career path build on and continue the Anchor Standards with more complexity, rigor, and career specificity.</p>
<p>1. Academic and Technical Foundations</p>	<ul style="list-style-type: none"> a. Identify general anatomy and human systems as they specifically relate to the medical histories of patients in the dental practice. b. Explain the anatomy of the human head and neck and their related structures and functions to classify healthy and abnormal tissue. c. Demonstrate the principles of body mechanics as they apply to operator and patient positioning. d. Summarize concepts of microbiology, including the nature of pathogens as related to disease transmission and prevention in the dental practice. e. Identify and implement oral health strategies for patients to attain optimal oral health. f. Determine the roles and responsibilities within the scope of practice of a dental assistant. g. Recognize the integrated systems approach to healthcare delivery services: prevention, diagnosis, pathology, and treatment. h. Determine the definition, spelling, pronunciation, and use of appropriate terminology in the healthcare setting. i. Apply practice management strategies and perform functions of the dental business office. j. Describe and perform the preclinical and clinical skills necessary to practice as a dental assistant.*
<p>2. Safety, Health and Environmental</p>	<ul style="list-style-type: none"> a. Explain the OSHA and CDC protocols necessary to maintain a safe and healthy environment for patients, health care workers, coworkers, and self within the healthcare setting. b. Recognize and apply emergency response skills necessary to assist with the most common emergencies in the dental practice, both minor and life threatening. c. Summarize hazardous waste disposal policies and procedures, including documentation, to ensure that regulated waste is handled, packaged, stored, and disposed of in accordance with federal, state, and local regulations.

Program Technical Standards:	Standards for each career path build on and continue the Anchor Standards with more complexity, rigor, and career specificity.
3. Communication	<ul style="list-style-type: none"> a. Communicate effectively within the healthcare team using appropriate verbal communication and written documentation skills. b. Communicate procedures and goals to patients using various communication strategies to respond to questions and concerns.
4. Problem Solving and Critical Thinking	<ul style="list-style-type: none"> a. Apply observation techniques to evaluate and detect changes in the health status of patients.
5. Leadership and Teamwork	<ul style="list-style-type: none"> a. Recognize the roles and responsibilities of individual members as part of the healthcare team and define their roles in promoting the delivery of quality healthcare. b. Evaluate the healthcare worker's role within their dental practice, their professional organization, and the overall healthcare system.
6. Ethics and Legal Responsibilities	<ul style="list-style-type: none"> a. Apply the legal and ethical aspects of dentistry to the practice of dental assisting. b. Research and observe factors that define cultural differences between and among different ethnic, racial, and cultural groups and special populations in the healthcare setting. c. Manage patient information strictly adhering to HIPAA and confidentiality guidelines.
7. Career Development	<ul style="list-style-type: none"> a. Identify education and training requirements, and research employment opportunities in dental assisting.

Program Technical Standards:	Standards for each career path build on and continue the Anchor Standards with more complexity, rigor, and career specificity.
*8. Dental Assisting Preclinical/Clinical Technical Skills	<ul style="list-style-type: none"> a. Dental Materials - Manipulate a variety of dental materials common to clinical and laboratory settings, including fabrication of dental appliances. b. Dental Specialities - Identify the multi-specialty practices of dentistry; describe specialized techniques, procedures, instrumentation, and procedural tray set-ups. c. Oral Embryology and Histology - Utilize and apply information about the biological formation and chemical composition of teeth for a variety of steps/techniques in patient care. d. Oral Pathology - Identify signs and symptoms of the diseases common to the oral cavity. e. Pharmacology - Explain dental pharmacology; describe common medications used in dentistry and the reasons patients would be prescribed those medications. f. Preventative Dentistry - Describe and demonstrate preventive dentistry procedures through patient education and clinical applications. g. Radiology - Produce diagnostic and radiographic images on patients as part of routine patient exams. h. Tooth Morphology - Identify teeth according to location, anatomical features, morphology, function, position and other identifying factors.

VT Health Science, Dental Assisting CTE Program - Academic Alignment with [VT Content Area Graduation Proficiencies \(PBGRs\)](#)

Graduation Proficiencies:	Indicators:
English Language Arts	High School 1. Reading: a, b, c, d, g, h, i 2. Writing: a, b, c, d, e 3. Writing: a, b, c 4. Speaking and Listening: a, b, c, d 5. Speaking and Listening: a, b, c, d 6. Language: a, c, e
Mathematics	High School 1. Modeling: a, b, c, d, e, f 2. Number and Quantity: c 3. Algebra: g, h, k 6. Statistics and Probability: a, b, c, e
Science	High School 3. Life Sciences: Structure, Function, and Information Processing: a, b, c, d, g 5. Life Sciences: Growth, Development and Reproduction of Organisms, Natural Selection and Adaptations: a, b, c, d
Global Citizenship/Social Studies	End of Gr. 12 Inquiry: Constructing compelling and supporting questions: a, b, c, d; Determining helpful sources: a Civics: Processes, Rules, and Laws: a Geography: Human Environment Interaction: Place, Regions, and Culture: a Evaluating Sources and Using Evidence: Gathering and Evaluating Sources: a; Developing claims and Using Evidence: a, b Communicating Conclusions and Taking Informed Action: Communicating: a; Taking Informed Action: a
Health	High School 1. Core Concepts: a, b, c, d, e 2. Analyze Influences: a, b, c 3. Access Information: a, b 4. Interpersonal Communication and Advocacy: a, b, c, d, e, f 5. Decision Making and Goal Setting: a, b, c, d 6. Self-Management: a

VT Health Science, Dental Assisting CTE Program Elements

Demonstration and Application:	Available Options:
Dual Enrollment/Fast Forward Courses	<ul style="list-style-type: none"> ● CCV: Intro to Healthcare (AHS-1045), Medical Terminology (AHS-1205), Human Biology (BIO-1140), Human Growth & Development (PSY-1050-VC50), Intro to Business (BUS-1010-VC50), Startup 802: An Entrepreneurial Mindset (BUS-1125-VC50) ● VTC: First Aid & CPR (AHS 2035), Intro to Nutrition (BIO 1030), Anatomy & Physiology I (BIO 2011), Anatomy & Physiology II (BIO 2012), Human Growth & Development (PSY 1050), Introduction to Psychology (PSY 1010)
Industry Recognized Credentials (IRCs)	<p>Tier 1:</p> <ul style="list-style-type: none"> ● American Heart Association - CPR or CPR/AED ● American Heart Association - First Aid ● American Heart Association - First Aid, CPR/AED ● American Heart Association - Health Care Provider CPR ● American Heart Association - Pediatric First Aid and CPR ● American Red Cross - CPR/AED ● American Red Cross - First Aid ● American Red Cross - First Aid, CPR/AED ● American Red Cross - Blood Borne Pathogens ● HIPPA Awareness Training for Healthcare Providers ● OSHA 10 ● Stop the Bleed <p>Tier 2:</p> <ul style="list-style-type: none"> ● Dental Assisting National Board (DANB) - Certified Dental Assistant ● Dental Assisting National Board (DANB) - Dental Radiography ● National Healthcareer Association (NHA) - Certified Clinical Medical Assistant ● National Healthcareer Association (NHA) - Certified Phlebotomy Technician ● National Registry of Emergency Medical

Demonstration and Application:	Available Options:
	<p>Technicians (NREMTC) - Emergency Medical Technician - Basic (EMT Basic)</p> <ul style="list-style-type: none"> ● Pharmacy Technician Certification Board (PTCB) - Certified Pharmacy Technician ● Vermont Office of Professional Regulation - Licensed Nursing Assistant ● ACT - National Career Readiness Certificate - Levels 5, 6, or 7
National Career Technical Student Organizations (CTSOs)	<ul style="list-style-type: none"> ● Future Health Professionals (HOSA) ● SkillsUSA
Work-Based Learning/Co-op (WBL)	Varies by CTE Center
Entrepreneurship Opportunities	Varies by CTE Center
Portfolio/Personalized Learning Plan (PLP)	Varies by CTE Center