Maryland CTE Programs of Study

# Certified Clinical Medical Assistant I (2025)

**GENERAL REQUIREMENTS. This course is recommended for students in Grades 9-12, and there is no prerequisite.** 1

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**INTRODUCTION** 2

**A** **Career and Technical Education (CTE) instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.** 2.A

**B** **The Health and Human Services Career Cluster promotes whole health in individuals and communities through diverse services. This sector includes technical, mental, and therapeutic services and personal care supported by medical and social sciences. By addressing social determinants of health and leveraging health data and science, this Cluster aims to enhance the overall health and resilience of individuals, families, and communities.** 2.B

**C** **The Certified Clinical Medical Assistant Program of Study prepares high school students with essential clinical and administrative skills. Students practice hands-on tasks such as measuring vital signs, performing diagnostic tests, administering medications under supervision, and managing patient records. The course also introduces the basics of pharmacology and medical office operations, ensuring students are prepared for a dual role in clinical and administrative healthcare settings. Key topics addressed are infection control and biohazard safety in clinical environments; measuring and documenting vital signs (temperature, pulse, respiration, blood pressure, BMI); clinical procedures: phlebotomy, electrocardiography (ECG), and specimen collection; basics of pharmacology: drug classifications, common medications, and administration methods; and administrative tasks: electronic health records (EHR), appointment scheduling, and billing basics. Students will be prepared to successfully pass the National Healthcareer Association's (NHA) Certified Clinical Medical Assistant exam.** 2.C

**D** **Certified Clinical Medical Assistant I introduce students to the foundational knowledge and skills required to pursue a career in healthcare. Students will gain an understanding of healthcare systems, patient care practices, foundations of anatomy and physiology, medical terminology, and safety protocols. Through**

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**classroom instruction and hands-on practice, students will learn to measure vital signs, provide basic patient care, and understand the principles of infection control. Emphasis is placed on developing professionalism, communication, and ethical decision-making. This course prepares students to progress into Certified Clinical Medical Assistant II, where they will complete the Certified Clinical Medical Assistant certification requirements.** 2.D

**E** **Students will participate in at least two Career-Connected Education and Work-Based Learning experiences in this course, which might include informational interviews or job shadowing relevant to the program of study.** 2.E

**F** **Students are encouraged to participate in extended learning experiences through aligned Career and Technical Student Organizations (CTSOs). CTSOs are a cocurricular requirement in the Carl D. Perkins Act, and alignment to CTSO activities is an expectation for CTE programs in the state of Maryland.** 2.F

**KNOWLEDGE AND SKILLS** 3

**A** **The student demonstrates the necessary skills for career development, maintenance of employability, and successful completion of course outcomes. The student is expected to:** 3.A

1. Identify and demonstrate positive work behaviors that enhance employability and job advancement, such as regular attendance, promptness, proper attire, maintenance of a clean and safe work environment, and pride in work. 3.A.1
2. Demonstrate positive personal qualities such as flexibility, open-mindedness, initiative, active listening, and a willingness to learn. 3.A.2
3. Employ effective reading, writing, and technical documentation skills. 3.A.3
4. Solve problems using critical thinking techniques and structured troubleshooting methodologies. 3.A.4
5. Demonstrate leadership skills and collaborate effectively as a team member. 3.A.5
6. Implement safety procedures, including proper use of software and following privacy guidelines. 3.A.6
7. Exhibit an understanding of legal and ethical responsibilities in the healthcare field, following copyright laws and regulations. 3.A.7
8. Demonstrate time-management skills and the ability to prioritize tasks in a technical setting. 3.A.8

**B** **The student identifies various career pathways in the healthcare field. The student is expected to:** 3.B

1. Develop a career plan that includes the necessary education, certifications, job skills, and experience for specific roles in healthcare. 3.B.1
2. Create a professional resume and portfolio that reflects skills, projects, certifications, and recommendations. 3.B.2
3. Demonstrate effective interview skills for roles in healthcare fields. 3.B.3

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**C** **The student develops technology and digital literacy skills. The student is expected to:** 3.C

1. Use technology as a tool for research, organization, communication, and problem-solving. 3.C.1
2. Use digital tools, including computers, mobile devices, collaboration platforms, and cloud services, to access, manage, and create information. 3.C.2
3. Demonstrate proficiency in using emerging and industry-standard technologies. 3.C.3
4. Understand ethical and legal considerations for technology use, including the principles of data protection, copyright, and responsible technology use. 3.C.4

**D** **The student integrates core academic skills into healthcare practices. The student is expected to:** 3.D

1. Demonstrate the use of clear communication techniques, both written and verbal, that are consistent with industry standards. 3.D.1
2. Apply English concepts such as writing informative texts when documenting healthcare plans and articulating goals. 3.D.2
3. Use mathematical concepts for measurement and conversion (Fahrenheit vs. Celsius), ratios and proportions as well as fraction and decimal conversions. 3.D.3

**E** **The student demonstrates foundational knowledge of healthcare systems and careers pathways within the healthcare industry. The student is expected to:** 3.E

1. Identify and describe major components of the healthcare system, including types of facilities, services provided, and organizational structures. 3.E.1
2. Research and present information on various healthcare careers, including required education, certifications, responsibilities, and work environments. 3.E.2
3. Compare and contrast different healthcare delivery models, such as private, public, and government-funded systems. 3.E.3
4. Create a personal career exploration plan, outlining short- and long-term goals, necessary skills and education, and steps to enter a chosen healthcare field. 3.E.4

**F** **The student demonstrates knowledge of human anatomy, physiology, and pathophysiology as it relates to patient care. The student is expected to:** 3.F

1. Explain the basic structure and functions of major human body systems in health and illness. 3.F.1
2. Identify the signs, symptoms, and care considerations for common diseases and disorders. 3.F.2
3. Apply concepts of anatomy and physiology to real-world scenarios. 3.F.3
4. Use medical terminology accurately to describe human anatomy, conditions, and procedures. 3.F.4

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**The student demonstrates the ability to provide safe and effective care in a healthcare environment. The student is expected to:** 3.G

1. Follow safety and emergency protocols to maintain a safe environment for patients, healthcare providers, and visitors. 3.G.1
2. Perform techniques related to infection control, including proper hand hygiene, use of personal protective equipment (PPE), disinfection of clinical spaces, and disposal of sharps, waste, and biohazards in compliance with OSHA regulations. 3.G.2
3. Identify various pathogenic microorganisms, modes of transmission, and strategies for preventing healthcare-associated infections (HAIs). 3.G.3
4. Demonstrate basic first aid skills and obtain first aid certification from a recognized organization, such as the American Heart Association. 3.G.4

**H The student demonstrates proficiency in technical procedures used in healthcare settings. The student is expected to:** 3.H

1. Accurately measure and record vital signs, including temperature, pulse, respiration, and blood pressure. 3.H.1
2. Assist with mobility and positioning techniques, including transferring patients and using assistive devices. 3.H.2
3. Apply mathematical operations and calculations related to healthcare, such as medication dosages and fluid intake/output measurements. 3.H.3

**I The student demonstrates knowledge of ethical and legal responsibilities in healthcare. The student is expected to:** 3.I

1. Analyze ethical considerations in healthcare, including patient confidentiality, autonomy, and informed consent. 3.I.1
2. Apply legal responsibilities by adhering to the scope of practice, mandatory reporting requirements, and healthcare laws such as HIPAA. 3.I.2
3. Evaluate case studies to make informed decisions regarding ethical and legal challenges in healthcare. 3.I.3
4. Demonstrate professional behavior by respecting patient rights, maintaining confidentiality, and upholding ethical standards in all healthcare interactions. 3.I.4

**J The student demonstrates understanding and application of healthcare technologies and resources. The student is expected to:** 3.J

1. Understand medical technologies and electronic health records (EHR) to document patient care and access healthcare information. 3.J.1
2. Evaluate research reports, media, and scientific studies related to healthcare issues and advancements. 3.J.2
3. Explore the role of health data and evidence-based practices in improving patient outcomes and healthcare delivery. 3.J.3