Maryland CTE Programs of Study

Pharmacy Technician III (2025)

GENERAL REQUIREMENTS. This course is recommended for students in Grades 11-12, and Pharmacy Technician I and II are the prerequisites. 1

1 GENERAL REQUIREMENTS. This course is recommended for students in Grades 11-12, and Pharmacy Technician I and II are the prerequisites. 1

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 Pharmacy Technician Program of Study equips high school students with the knowledge and skills needed for careers in pharmacy and healthcare. Through a sequence of courses, students learn healthcare systems, pharmacology, prescription processing, and patient care practices, with hands-on training in compounding, inventory management, and pharmacy technology. The program includes a minimum of 160 hours of work-based learning, internships, or apprenticeships in licensed pharmacy settings, meeting Maryland Board of Pharmacy requirements. Students are prepared to achieve national certification as Certified Pharmacy Technicians (CPhT) and transition into entry-level roles or advanced healthcare pathways. 2.C

D Pharmacy Technician III course explores advanced healthcare topics, focusing on the human body's structure, functions, and pathophysiology. Students apply their knowledge in laboratory investigations, analyze diagnostic data, and learn therapeutic interventions, preparing for roles in advanced pharmacy and healthcare pathways. 2.D

Skip to main content

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 co-curricular 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 reflect skills, projects, certifications, and recommendations. 3.B.2
3. Demonstrate effective interview skills for roles in healthcare fields. 3.B.3
4. Understand the different types of pharmacies, including long-term care, nuclear, hospital, hospice, and retail. 3.B.4

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

Skip to main content

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 procedures 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 advanced sterile and hazardous drug concepts (simulation). The student is expected to: 3.E

1 Conduct a spill-kit drill using dyed water; submit an incident report and decontamination checklist with zero critical omissions. 3.E.1

2 Map USP <800> workflows (receiving → disposal) and defend the sequence using risk-assessment language (containment, segregation, labeling). 3.E.2

F The student demonstrates advanced nonsterile and specialty compounding practices (simulation). The student is expected to: 3.F

1 Prepare complex formulations (e.g., emulsions) meeting ±3% mass balance and pass a labeled QC checklist (≥95%). 3.F.1

2 Produce BUD justifications that cite USP criteria, packaging, and known stability data; flag when pharmacist review is required. 3.F.2

3 Assemble a REMS documentation packet for a case therapy with all patient, pharmacy, and prescriber components present. 3.F.3

G The student demonstrates automation and informatics competencies (simulation). The student is expected to: 3.G

1 Reconcile ADC “inventory” (emulated) and resolve 100% of seeded discrepancies; generate a variance report with root-cause statements and corrective actions. 3.G.1

2 Create inventory analytics (par levels, usage, short-dates) in a spreadsheet; recommend two purchasing adjustments supported by data. 3.G.2

H The student demonstrates audit readiness and medication safety/quality improvement (simulation). The student is expected to: 3.H

Skip to main content

1 Compile a mock audit binder (invoices, 222/CSOS samples, perpetuals, temperature/cleaning logs) that passes an external rubric at ≥90%. 3.H.1

2 Perform a near-miss RCA on a provided case and submit a corrective-action plan with measurable follow-ups and owners. 3.H.2

I The student demonstrates health-system workflows at technician depth (simulation). The student is expected to: 3.I

1 Produce IV batch and TPN label sets with correct calculations and staging documentation; achieve zero critical label errors. 3.I.1

2 Document waste/returns for sterile and hazardous products using chain-of-custody forms with 100% required fields. 3.I.2

J The student demonstrates OTC/herbal support and pharmacist referral (simulation). The student is expected to: 3.J

1 Build an OTC planogram and solve 10 red-flag scenarios with appropriate pharmacist referral documentation. 3.J.1

2 Analyze five herb-drug interaction cases and produce referral scripts with rationale tied to mechanism or risk. 3.J.2

3 Identify common herbal products (e.g., St. John's wort, ginkgo, ginseng, echinacea, garlic), typical dosage forms (tea, capsules, extracts, topicals), and two interaction/red-flag scenarios per product; document pharmacist referral. 3.J.3

4 Screen interaction/contraindication cases using references and document "no counseling—refer to pharmacist" on all clinical recommendations; record pharmacist response. 3.J.4

K The student demonstrates capstone completion and transition to practice (classroom or WBL). The student is expected to: 3.K

1 Submit a capstone portfolio (audit binder, QC artifacts, RCA, analytics report, calculation exam ≥90%, mock interview rubric ≥85%). 3.K.1

2 Finalize national certification application steps and produce a 30-60-90 day development plan for entry-level employment. 3.K.2

3 Complete national certification preparation (PTCE/ExCPT) including domain-mapped study plan, practice exam, and application steps; achieve ≥85% on a comprehensive mock. 3.K.3