# Career and Technology Education (Completer Programs)
## COLLEGE AND CAREER READY

Students who graduate from CTE programs are successfully prepared to participate in post-secondary education and/or the work force.

**CAREER READY** students have the knowledge, skills and career experience to be successful in the modern day, competitive, workforce.  CTE students have opportunities to earn industry certifications through technical skill testing and/or valuable program affiliations with professional organizations. CTE programs require industry-based curriculum, industrial grade equipment, specific teacher credentials and regular program monitoring by industry experts.  In addition, program staff regularly meet with local businesses and colleges/post-secondary education institutions to make sure CTE programs provide students with the knowledge, skills and experiences necessary to be successful in their chosen field.  As a culminating experience, students who complete CTE programs, have the opportunity to apply for career related internships to apply academic, technical and employability skills and knowledge in the work place.

**COLLEGE READY** students are prepared for the rigors of post-secondary education. Through extensive partnerships CTE students can earn college credits while still in high school (see table below).  CCPS works with colleges to annually review CTE curricula and competencies to ensure alignment with college standards and expectations.  Students can earn articulated credits for which they must meet certain criteria and enroll in the specific college/university.  In some cases, students earn transcripted credit; credits awarded that transfer to other colleges/universities.

Key

\# Honors/AP Transcirpted Level- Most of the classes in this program are on either the 4.5 or 5.0 GPA level

\*College awards credits on a transcript for qualifying students in this program whether they attend the college or not.

\*\*Prerequisite- the following is needs to be completed before attending the program.

| Arts, Media and Communication | | | |
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| **Programs** | **Areas Certification/Professional Affiliation** | **College Credits** | **Schedule / **Prerequisite** |
| Print Production | PrintED - Graphic Arts Education & Research Foundation (GAERF)<br>• Graphic Communications<br>• Digital File Preparation /Digital File Output | Bridgemont Community & Technical College  16<br>Carroll Community College  3<br>Montgomery Comm. College  4 | 1 semester program<br>(Junior or senior year)<br>MODS 2-3-4<br>**Principles of Art, Media, and Communications or H Comm Art** |
| Video Production | Partnering with the Community Media Center<br>(State of the art HD cameras and Final Cut Pro professional editing software) | Stevenson University  3<br>Art Institute  4 | 1 semester program Jr OR Sr year<br>MODS 1-2-3<br>(New option : MODS 2-3 all year)<br>**Principles of Art, Media, and Communications or<br>H Comm Art** |
| **Construction and Development** | | | |
| **Programs** | **Areas Certification/Professional Affiliation** | **College Credits** | **Schedule / **Prerequisite** |
| Carpentry | ●OSHA-10 Certified<br>●NCCT© Academic Core v2<br>●National Registry (National Center for Construction Education and Research (NCCER)<br>● Contractors Apprenticeship | NCCT Academic Carpentry | Comm College of Baltimore County  6<br>Pennsylvania College of Technology- up to 9 | SEM2 junior year<br>SEM1 senior year<br>MODS 2-3-4 |
| Electrical Construction | | NCCT Academic Electrical Construction | Comm College of Baltimore County  6<br>Fredrick Community College  7<br>Pennsylvania College of Technology  TBD | |
| HVAC | | NCCT Academic HVAC Associated Builders & | Community College of Baltimore Co.  22<br>Frederick Community College  10<br>Pennsylvania College of Tech  -up to 12<br>University of Northwestern Ohio  6 | |
| Masonry | | NCCT Academic Masonry | Community College of Baltimore County  6<br>Pennsylvania College of Tech  – up to 9 | |

| Consumer Services and Hospitality | | | |
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| **Programs** | **Areas Certification/Professional Affiliation** | **College Credits** | **Schedule / \*\*Prerequisite** |
| Culinary Arts:<br>Option 1: Professional Cook<br>Option 2: Baking and Pastry | ●American Culinary Federation© (ACF)-<br>  Culinary Arts, Cook Level 2<br>  Retail Commercial Baking<br>Restaurant Association of Maryland<br>●ServSafe©- Food manager | Anne Arundel CC 6<br>Culinary Institute of America 3<br>Fredrick Community College 10<br>Howard Community College 7<br>Pennsylvania College of Technology TBD<br>Stratford University 18 | SEM2 junior year<br>SEM1 senior year<br>Professional Cooking MODS 2-3-4<br>Baking & Pastry MODS 1-2-3 |
| Cosmetology | Maryland Board of Cosmetology Certification:<br>● Cosmetologist License<br>● 1500 clinical hours | | 3 semester program      MODS 2-3-4<br>SEM 1 & 2 junior yr & SEM 1 senior yr    OR<br>SEM 2 junior yr & SEM 1 & 2 senior yr<br>**(Recommended: ANAT & PHYS)** |
| Textile and Fashion Careers | Garment Studio Construction© college level fashion curriculum | Stevenson University 3 | SEM2 junior year<br>SEM1 senior year<br>MODS 2-3-4 |
| **Health and Bioscience** | | | |
| **Programs** | **Areas Certification/Professional Affiliation** | **College Credits** | **Schedule / \*\*Prerequisite** |
| # Nursing (Academy of Health Professions n(AHP)) | Maryland State Board of Nursing Certifications:<br>  Certified Nursing Assistant (CNA), Geriatric Nursing Assistant,<br>  Medical Assistant Certification (CCMA)<br>CPR Certification | Carroll Community College TBD<br>Fredrick Community College 10<br>Pennsylvania College of Technology TBD<br>Stevenson University 4<br>Community College of Baltimore Co. 3 | Senior year program<br>SEM1 MODS 1-2-3<br><br>SEM2 MODS 1-2<br>**\*\*Human Anatomy and Phys.<br>(Chem II recommended)** |
| Physical Rehabilitation (AHP) | Partners with local sports medicine and physical rehabilitation organizations | Carroll Community College 3 | |
| Career Cert Programs (AHP):<br>Career Nursing Assistant | Certified Nursing Assistant (CNA), Geriatric Nursing Assistant | --- | SEM2 Jr year; SEM1 Sr year; MODS 2-4 |
| Dental Assistant<br>Pharmacy Technician | Radiation Health and Safety certification<br>National pharmacy technician certification exams | Sr year Dual Enrollment at Carroll Comm<br>Sr year Dual Enrollment at Carroll Comm | SEM2 Jr year; SEM1 Sr year; MODS 2-3<br>SEM2 Jr year; SEM1 Sr year; MODS 2-3 |
| #Biomedical Sciences-Project Lead the Way© | The Biomedical Science program is certified by the nationally recognized, Project Lead the Way© program. | Frederick Community College 14<br>Indiana University of PA 12<br>Stevenson University *8<br>Missouri University of Science & Tech *12 | SEM2 junior year<br>SEM1 senior year<br>MODS 2-3<br>**\*\*ALGII / college prep Math & Sci each yr.** |
| **Human Resource Services** | | | |
| **Programs** | **Areas Certification/Professional Affiliation** | **College Credits** | **Schedule / \*\*Prerequisite** |
| #Homeland Security and Emergency Preparedness:<br>Criminal Justice | Credit earned on a transcript  for CRIM 101 through Carroll Community College* | Carroll Community College *3<br>Frederick Community College 3<br>University of Maryland Univ College 3 | SEM2 junior year<br>SEM1 senior year<br>MODS 2-3 |
| Homeland Security and Emergency Preparedness:<br>Geographical Information Systems Technology | Prepares student to obtain the Digital Quest - STARS (Spatial Technology and Remote Sensing**)** certification through a comprehensive test and capstone project | Community College of Baltimore Co. 3<br>Frederick Community College 3 | |

| Information Technology | | | |
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| **Programs** | **Areas Certification/Professional Affiliation** | **College Credits** | **Schedule / \*\*Prerequisite** |
| Cybersecurity (CISCO Networking©) | **Cisco CCNA Security Certification**<br>**Cisco CCNA Routing & Switching Certification** | Comm College of Baltimore County 16<br>Fredrick Community College 18<br>Pennsylvania College of Technology TBD | SEM2 junior year<br>SEM1 senior year<br>MODS 2-3-4 |
| Cyber Operations (CISCO)© | LPI Linux Essentials Professional Development Certificate<br>PCAP – Python Certified Associate Programmer<br>**CCNA Cyber Ops Certification** | (New program, credits pending) | SEM2 junior year<br>SEM1 senior year<br>MODS 2-3-4 |
| **Manufacturing, Engineering, and Technology** | | | |
| **Programs** | **Areas Certification/Professional Affiliation** | **College Credits** | **Schedule / \*\*Prerequisite** |
| Applied Mechanical Engineering | National Institute of Metal Working Skills (NIMS©):<br>●Measurement, Materials, and Safety, Job Planning, ●Benchwork and Layout; other certifications, optional for qualified students | Community College of Baltimore County 17<br>Pennsylvania College of Technology TBD | SEM2 junior year<br>SEM1 senior year<br>MODS 2-3-4 |
| Drafting | AutoCAD© Certification Test | Community College of Baltimore County 6<br>Fredrick Community College 6<br>Pennsylvania College of Technology TBD | SEM2 junior year<br>SEM1 senior year<br>MODS 2-3-4 |
| #Engineering- Project Lead the Way© | Certified by the nationally recognized, Project Lead the Way©, program. | Community College of Baltimore County 6<br>Fredrick Community College 3<br>Pennsylvania College of Technology TBD<br>\*Rochester Institute of Technology 12<br>University of MD, Baltimore Co. 3<br>University of MD, Eastern Shore 6 | Junior yr MODS 2-3 (spring or fall)<br>Senior yr 3 credits (spring or fall)<br>**\*\*ALGII / college prep Math & Sci each yr.** |
| Welding | American Welding Society (AWS) certification<br>National Registry (National Center for Construction Education and Research (NCCER)) ●NCCT© Academic Core v2<br>OSHA-10 Certified | Fredrick Community College 13<br>Pennsylvania College of Technology TBD | SEM2 junior year<br>SEM1 senior year<br>MODS 2-3-4 |
| **Transportation Technologies** | | | |
| **Programs** | **Areas Certification/Professional Affiliation** | **College Credits** | **Schedule / \*\*Prerequisite** |
| Automobile Service Technology | The National Institute for Automobile Service Excellence (ASE©)<br>●Brakes ●Maintenance & Light Repair ●Suspension/Steering ●Electrical/ Elec. Systems ●Engine Performance | Community College of Baltimore Co. 5<br>Montgomery Community College 7<br>Pennsylvania College of Tech Up to 15<br>Universal Technical Institute Up to 4<br>University of Northwestern Ohio Up to 12 | SEM2 junior year<br>SEM1 senior year<br>MODS 2-3-4 |
| Collision Repair Technology | The National Institute for Automobile Service Excellence (ASE©)<br>●Non-Structural Analysis & Damage Repair<br>●Painting & Refinishing ●Structural Analysis & Damage Repair | Pennsylvania College of Tech. Up to 18 | SEM2 junior year<br>SEM1 senior year<br>MODS 2-3-4 |
| Heavy Equipment and Truck Technology | The National Institute for Automobile Service Excellence (ASE©)<br>●Brakes ●Diesel Engines & Light Repair<br>●Electrical/ Electronic. Systems | Pennsylvania College of Technology- Up to 7<br>Universal Technical Institute Up to 4<br>University of Northwestern Ohio Up to 12 | SEM2 junior year<br>SEM1 senior year<br>MODS 2-3-4 |