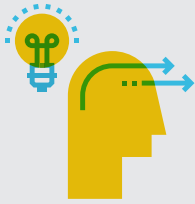


MISSION: To maximize academic achievement by engaging middle and high school CMS students in rigorous and relevant learning to prepare for **postsecondary education and careers.**

HOW CTE WORKS

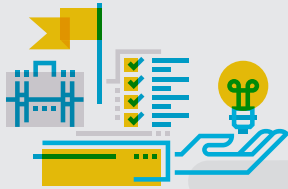
1 DISCOVER While still in middle school, CTE allows CMS students to begin to explore their career interests.



A variety of career fields called **pathways** are offered in high school to help equip students with the 21st century skills needed for a global economy.



2 UNLEASH Sequenced CTE career pathway courses give CMS high school students the framework to begin to move toward their career goals.



CTE courses offer **hands-on** skills development, relevant **industry knowledge**, and the use of **state of the art equipment**, relative to each chosen career pathway.

EXAMPLE CTE CAREER PATHWAY: SOFTWARE DEVELOPMENT

COURSE SEQUENCE:

- 1 AP COMPUTER SCIENCE PRINCIPLES
- 2 PYTHON I
- 3 AP COMPUTER SCIENCE A
- 4 SOFTWARE DEVELOPMENT FUNDAMENTALS



A variety of CTE programs of study are hosted at every CMS high school



Students who complete a pathway sequence earn recognition as a Concentrator

3 SOAR CTE students are better prepared for higher-level courses in college as well as a wide range of high-wage, high-skill, high-demand careers.



CTE students are given the opportunity to receive **industry recognized certifications**, earn credit towards **postsecondary degrees**, or **begin careers** after graduation.



99%

CMS GRADUATION RATE FOR STUDENTS CONCENTRATING IN THE CTE PROGRAM



Mecklenburg County employers need CTE students!



Heightened exposure to guest lectures and career fairs










Enroll in early college opportunities









Job shadowing and paid summer internships

CPCC ARTICULATED CREDIT






Articulated credit can be earned in several of the CMS CTE pathway courses. The majority of these courses require a final letter grade of a B or higher AND a score of 93 or higher on the NC administered end of course exam. Please check with your School CDC to determine eligibility and requirements.*

	CAREER PATHWAY	COURSE SEQUENCE <small>(Sequence may vary slightly by school)</small> EFFECTIVE FALL 2021	INDUSTRY CREDENTIALS	CPCC ARTICULATED CREDIT * CONDITIONS FOR CREDIT: FINAL GRADE B OR HIGHER AND 93+ ON END OF COURSE EXAM
BUSINESS	 BUSINESS MANAGEMENT**	<ol style="list-style-type: none"> 1 Principles of Business 2 Business Management I 3 Business Management II 4 Accounting I (Optional) 	<ul style="list-style-type: none"> • Quickbooks 	CCP Pathway in Development
	 FINANCIAL PLANNING**	<ol style="list-style-type: none"> 1 Principles of Business 2 Financial Planning I 3 Financial Planning II 4 Accounting I (Optional) 	<ul style="list-style-type: none"> • Quickbooks 	CCP Pathway in Development
DIGITAL MARKETING	 CUSTOMER RELATIONSHIP MANAGEMENT (CRM)	<ol style="list-style-type: none"> 1 Marketing 2 Marketing Applications 3 Intro to Customer Relationship Management 4 Customer Relationship Management I 	<ul style="list-style-type: none"> • Salesforce Administration 	TBD
	 DIGITAL MARKETING	<ol style="list-style-type: none"> 1 Marketing 2 Intro to Adobe Applications 3 Digital Marketing 	<ul style="list-style-type: none"> • Google Analytics • Trailhead 	Marketing = ETR 230 Entrepreneur Marketing OR MKT 110 Principles of Fashion OR MKT 120 Principles of Marketing
	 GRAPHIC & DIGITAL DESIGN	<ol style="list-style-type: none"> 1 Intro to Adobe Applications 2 Adobe Visual Design 3 Adobe Video Design 	<ul style="list-style-type: none"> • Adobe: Photoshop, InDesign, Illustrator, Premier 	Adobe Visual = GRD 151 Computer Design Basics Digital Media I and II = DME 110 Intro to Digital Media
HEALTH	 BIOMEDICAL SCIENCE**	<ol style="list-style-type: none"> 1 Biomedical Technology I (optional) 2 Principles of Biomedical Science 3 Human Body Systems 4 Medical Interventions 5 Biomedical Innovations (optional) 	<ul style="list-style-type: none"> • Stop the Bleed • American Heart Association (AHA) Basic Life Support, Heart Saver, First Aid 	TBD
	 NURSING FUNDAMENTALS**	<ol style="list-style-type: none"> 1 Health Science I 2 Health Science II 3 Nursing Fundamentals 	<ul style="list-style-type: none"> • Stop the Bleed • Nurse Aide I • American Heart Association (AHA) Basic Life Support, Heart Saver, First Aid • OSHA 10-Hour General (Health Care) 	Health Science I = MED 121 Medical Terminology I AND MED 122 Medical Term. II Health Science II = HSC 110 Orientation to Health Careers AND (HSC 120 CPR OR MED 180 CPR Certification) Nursing Fundamentals = NAS 101 Nursing Assistant I




** Pathway supports success in AP courses

CAREER PATHWAY	COURSE SEQUENCE <small>(Sequence may vary slightly by school)</small> EFFECTIVE FALL 2021	INDUSTRY CREDENTIALS	CPCC ARTICULATED CREDIT * CONDITIONS FOR CREDIT: FINAL GRADE B OR HIGHER AND 93+ ON END OF COURSE EXAM
 <p>AUTOMOTIVE</p>	<ol style="list-style-type: none"> 1 Automotive Service Fundamentals 2 Automotive Service I 3 Automotive Service II 4 Automotive Service III (Optional) 	<ul style="list-style-type: none"> • SP1/SP2: Mechanical Pollution Prevention & Safety • Automotive Service Excellence (ASE) Entry Level Certification: Maintenance and Light Repair, Brakes, G1- MLR 	<p><i>Automotive Service I, II AND III =</i> TRN 111 Chassis Maint/Light Repair AND TRN 112 Powertrain Maint/Light Repair AND AUT 113 Automotive Servicing I Must complete MLR Task List</p>
 <p>ADVANCED MANUFACTURING & ENGINEERING**</p>	<ol style="list-style-type: none"> 1 Intro to Engineering Design 2 Principles of Engineering 3 Computer Integrated Manufacturing 		<p><i>Computer Integrated Man. =</i> MAC 121 Introduction to CNC</p>
 <p>ARCHITECTURE & ENGINEERING**</p>	<ol style="list-style-type: none"> 1 Drafting I 2 Drafting II - Honors Architecture 3 Civil Engineering & Architecture 	<ul style="list-style-type: none"> • Autodesk Revit User Certified • Autodesk AutoCAD User Certification 	<p><i>Drafting Architecture III =</i> ARC 113 Residential Architecture Technology AND ARC 225 Architectural Building Modeling I</p>
 <p>CARPENTRY</p>	<ol style="list-style-type: none"> 1 Core Curriculum & Sustainable Construction 2 Carpentry I 3 Carpentry II 	<ul style="list-style-type: none"> • NCCER for Carpentry • OSHA – 10 Hour Construction 	<p><i>Core and Sustainable Construction AND Carpentry I =</i> CAR 110 Intro to Carpentry OR WOL 110 Basic Construction Skills OR CST 110 Intro to Construction <i>Carpentry II =</i> CST 111 Construction I <i>Carpentry III =</i> CST 112 Construction II</p>
 <p>ENVIRONMENTAL SUSTAINABILITY**</p>	<ol style="list-style-type: none"> 1 Natural Resources I 2 Natural Resources II 3 Sustainable Agriculture Production I 4 Sustainable Agriculture Production II 	<ul style="list-style-type: none"> • OSHA 10 Hour • Young Plant Professional and Pesticide Control • Hunter Safety 	<p>TBD</p>
 <p>INTERIOR DESIGN</p>	<ol style="list-style-type: none"> 1 Interior Design I 2 Interior Design II 3 Interior Design - Digital Applications 	<ul style="list-style-type: none"> • Autodesk Revit User Certified 	<p><i>Interior Applications =</i> DES 235 Products</p>

** Pathway supports success in AP courses

	CAREER PATHWAY	COURSE SEQUENCE <small>(Sequence may vary slightly by school)</small> EFFECTIVE FALL 2021	INDUSTRY CREDENTIALS	CPCC ARTICULATED CREDIT * CONDITIONS FOR CREDIT: FINAL GRADE B OR HIGHER AND 93+ ON END OF COURSE EXAM
PUBLIC SAFETY	 EMERGENCY MANAGEMENT	<ol style="list-style-type: none"> 1 Public Safety I 2 Public Safety II 3 Emergency Management System I 4 Emergency Management System II 	<ul style="list-style-type: none"> • FEMA IS100, IS200, IS700, IS800 • CERT Basic • 911 Telecommunications • NC Emergency Management I • NC Emergency Management II 	TBD
	 FIREFIGHTER TECHNOLOGY	<ol style="list-style-type: none"> 1 Public Safety I 2 Public Safety II 3 Firefighter Technology I 4 Firefighter Technology II 	<ul style="list-style-type: none"> • FEMA IS100, IS200, IS700, IS800 • CERT Basic • 911 Telecommunications • NCOSFM - Firefighter Technology I • NCOSFM - Firefighter Technology II 	TBD
	 LAW ENFORCEMENT & PROTECTION	<ol style="list-style-type: none"> 1 Public Safety I 2 Public Safety II 3 Law & Justice I 4 Law & Justice II 	<ul style="list-style-type: none"> • FEMA IS100, IS200, IS700, IS800 • CERT Basic • 911 Telecommunications • Certified Protection Officer 	TBD
SERVICE	 COSMETOLOGY	<ol style="list-style-type: none"> 1 Entrepreneurship I 2 Entrepreneurship II 3 Cosmetology I - Junior Year 4 Cosmetology II - Senior Year 	<ul style="list-style-type: none"> • Students are eligible to take the NIC Cosmetology Written Exam once they earn 1000 hours. 	Students can continue their education at CPCC with all hours earned transferred.
	 CULINARY ARTS & HOSPITALITY	<ol style="list-style-type: none"> 1 Culinary Arts & Hospitality I 2 Culinary Arts & Hospitality II Applications 3 Culinary Arts & Hospitality III 4 Culinary Arts & Hospitality IV Applications (Optional) 	<ul style="list-style-type: none"> • Always Food Safe • ProStart 	TBD

** Pathway supports success in AP courses

CAREER PATHWAY	COURSE SEQUENCE <small>(Sequence may vary slightly by school)</small> EFFECTIVE FALL 2021	INDUSTRY CREDENTIALS	CPCC ARTICULATED CREDIT * CONDITIONS FOR CREDIT: FINAL GRADE B OR HIGHER AND 93+ ON END OF COURSE EXAM
 APP DEVELOPMENT & WEB DESIGN**	<ol style="list-style-type: none"> 1 Intro to Adobe Applications 2 Adobe Visual Design 3 Adobe Digital Design 4 Microsoft HTML5 App Development Fundamentals 	<ul style="list-style-type: none"> • Adobe Photoshop, InDesign, Illustrator, Dreamweaver • Microsoft: HTML 5 App Development 	Adobe Visual = GRD 151 Computer Design Basics
 GAME ART DESIGN	<ol style="list-style-type: none"> 1 Game Art Design 2 Digital Design & Animation 3 3D Modeling 4 Unity 3D Programming 	<ul style="list-style-type: none"> • 3D Modeling- Autodesk 3DS Max certification • Unity Programming- Unity certification 	TBD
 SOFTWARE DEVELOPMENT	<ol style="list-style-type: none"> 1 AP Computer Science Principles 2 Python I 3 AP Computer Science A 4 Software Development Fundamentals 	<ul style="list-style-type: none"> • Microsoft Technical Associate: Software Fundamentals 	Software Development Fundamentals = Must Pass MS98-364 Certification Exam + Conditions for Credit CSC 143 Object-Oriented Programming OR DPA 110 Database Concepts OR SGD 122 Simulation and Game Database Programming

*** CPCC ARTICULATED CREDIT (Confirmed list through June 30, 2021)**

Articulated credit is earned as a result of a student passing the designated CMS CTE course(s) with a final letter grade of a B or higher AND a score of 93 or higher on the NC administered end of course exam. In some cases students must show proficiency in multiple courses plus a certification in order to receive articulated credit. College articulated courses DO NOT show on a high school or college transcript. These courses, if the criteria is met, will be waived from the applicable program of study through Central Piedmont Community College.

**** AP COURSES ALIGNED TO CTE PATHWAYS**

Advanced Manufacturing & Engineering: AP Calculus, AP Statistics

Architecture & Engineering: AP 2D Art & Design & 3D Art & Design

Biomedical Science: AP Biology


Nursing Fundamentals: AP Biology

App Development & Web Design: AP Computer Science Principles, AP Computer Science A

Business Management: AP Macroeconomics, AP Microeconomics

Financial Planning: AP Macroeconomics, AP Microeconomics

Environmental Sustainability: AP Environmental Science

Learning Community	Northwest					Northeast				Southeast				Central 1		Central 2				Southwest				
 Pathway Groups/ CTE Pathways	Phillip O. Berry Acad. of Tech.	Harding University HS	Hopewell	Hough	West Mecklenburg	Mallard Creek	North Mecklenburg	Rocky River	Julius Chambers (Vance)	Butler	East Mecklenburg	Independence	Providence	Garinger	iMeck at Cochrane	West Charlotte	Hawthorne Academy of Health Science	Military Global Leadership & Public Safety Academy at Hawthorne	Myers Park	Northwest School of the Arts	JT Williams	Ardrey Kell	Olympic	South Mecklenburg
	Business																							
Business Management							✓		✓	✓	✓	✓			✓								✓	✓
Financial Planning					✓			✓						✓										
Digital Marketing																								
Customer Relationship Management (CRM)			✓			✓			✓	✓		✓		✓										
Digital Marketing					✓		✓			✓	✓		✓		✓								✓	
Graphic & Digital Design	✓	✓	✓		✓		✓	✓	✓				✓	✓	✓					✓				
Health																								
Biomedical Science	✓		✓							✓	✓	✓	✓	✓			✓		✓			✓	✓	✓
Nursing Fundamentals																✓	✓							
Industrial Technology & Design																								
Automotive		✓					✓				✓	✓	✓						✓					✓
Advanced Manufacturing & Engineering		✓							✓		✓	✓							✓				✓	
Architecture & Engineering				✓		✓						✓	✓									✓		
Carpentry		✓			✓							✓											✓	
Environmental Sustainability													✓	✓						✓				
Interior Design										✓														
Public Safety																								
Emergency Management																		✓						
Firefighter Technology																		✓						
Law Enforcement & Protection									✓									✓						
Service																								
Cosmetology					✓		✓									✓								
Culinary Arts & Hospitality					✓		✓				✓	✓		✓	✓				✓				✓	✓
Technology																								
App Development & Web Design			✓		✓			✓		✓						✓								
Game Art Design	✓	✓						✓						✓										
Software Development	✓	✓	✓	✓	✓	✓	✓	✓						✓	✓				✓					✓

NOTE: Pathway schools may offer a variety of additional courses that are not expressed in a formal pathway that can complement or enhance a student's pathway or offer additional opportunity for career exploration. Non-pathway schools offer a variety of CTE courses.