

Career Clusters & Career Pathways CTE Course Sequence Guide

"The Ultimate Classroom Experience"

GCS CTE Career Clusters & Career Pathways

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CTE Career Cluster
Agricultural, Food and Natural Resources

CTE Career Pathway
Animal Science (ANSC)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	AA21 Animal Science I	AA22 Animal Science II – Food Animal* [^] or AA23 Animal Science II – Companion Animal*	AA41 Veterinary Assisting [^] Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	AU10 Foundations of Agriculture CC11 Microsoft Excel [^] BF10 Business Essentials ME11 Entrepreneurship I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Youth for the Quality Care of Animals (YQCA) Certification, Animal Waste Certification, Canine Care and Training Program (CCTP), Certified Veterinary Assistant				
CTE Careers Existing Today and Tomorrow: Veterinarian, Animal Health Scientist, Animal Biologist, Science Policy Director				

*Denotes CTE Concentrator Course

[^]Denotes CTE Inherently Honors Course

CTE Career Cluster
Agricultural, Food and Natural Resources

CTE Career Pathway
Plant Systems (PLSV)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	AP41 Horticulture I	AP42 Horticulture II* or AP44 Horticulture II – Landscaping*^ or AL43 Horticulture II – Turfgrass Management*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	AU10 Foundations of Agriculture CC11 Microsoft Excel^ BF10 Business Essentials ME11 Entrepreneurship I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Turfgrass Management Technology Certificate			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, North Carolina Certified Plant Professional (CPP), Certified Young Plant Professional (CYPP), NC Private Pesticide Applicator				
CTE Careers Existing Today and Tomorrow: Landscaper, Global System Architect, Fear Containment Manager				

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^Denotes CTE Inherently Honors Course

**CTE Career Cluster
Architecture**

**CTE Career Pathway
Carpentry (CARP)**

Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	IC00 Construction Core	IC21 Carpentry I	IC22 Carpentry II*^	IC23 Carpentry III^ Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel^ IC41 Electrical Trades I^ ME11 Entrepreneurship I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, OSHA 10-Hour Construction Industry Certifications, NC NCCER Credential - Carpentry I, NC NCCER Credential - Carpentry II, CPR, First-Aid					
CTE Careers Existing Today and Tomorrow: Shareability Auditor, Opportunity Spotters, Impact Assessors, Construction Managers, Carpenters, Limited Energy Electricians, Construction Material Designers, Tear-Down Teams					

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CTE Career Cluster Architecture					
CTE Career Pathway Drafting Architectural (DRFA)					
Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	IC61 Drafting I [^]	IC62 Drafting II – Architectural* [^]	IC63 Drafting III – Architectural [^]	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	FI21 Interior Design Fundamentals CC11 Microsoft Excel [^] ME11 Entrepreneurship I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Architectural Technology Certificate				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Autodesk Certified User AutoCAD, Autodesk Certified User Revit, Autodesk Certified Professional Revit					
CTE Careers Existing Today and Tomorrow: Architect, Construction Material Designer, Structural Engineer, Global System Architect					

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CTE Career Cluster

Architecture

CTE Career Pathway

Electrical Trades (ELTR)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	IC00 Construction Core	IC41 Electrical Trades I [^]	IC42 Electrical Trades II* [^]	IC43 Electrical Trades III [^] Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel [^] ME11 Entrepreneurship I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Electrical Systems Technology Diploma Electrical Systems Technology - Wiring Certificate				
CTE Industry Recognized Credentials: NC NCCER - Construction Core, OSHA 10-Hour Construction Industry Certification, NC NCCER Credential - Electrical Trades, WorkKeys National Career Readiness Certificate					
CTE Careers Existing Today and Tomorrow: Electrician, Micro Grid Strategists, Power Conversion Specialists					

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CTE Career Cluster
Architecture

CTE Career Pathway
Heating, Ventilation, AC, & Refrigeration (HVAC/R)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	IC00 Construction Core	IC31 Heating, Ventilation, Air Conditioning, & Refrigeration I [^]	IC32 Heating, Ventilation, Air Conditioning, & Refrigeration II ^{*^}	IC33 Heating, Ventilation, Air Conditioning, & Refrigeration III [^] Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel [^] ME11 Entrepreneurship I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Air Conditioning, Heating and Refrigeration Technology Diploma Air Conditioning, Heating, and Refrigeration Technology - Basic Air Conditioning Certificate				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, NCCER Certification, Occupational Safety and Health Administration (OSHA) 10-Hour Construction Industry Credential					
CTE Careers Existing Today and Tomorrow: Commercial HVAC Technician, HVAC Project Manager, Controller, Robot Sherpa Operations Manager, IoT Smart Appliance Installer					

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CTE Career Cluster Architecture				
CTE Career Pathway Interior Design (INDE)				
Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	FI21 Interior Design Fundamentals	FI22 Interior Studio* or FI23 Interior Design Technology*^	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	FA31 Apparel and Textile Production I IC61 Drafting I^ CD10 Adobe Visual Design I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree			
CTE Industry Recognized Credentials: Pre-Professional Assessment and Certification in Interior Design Fundamentals, Autodesk Certified User Revit, WorkKeys National Career Readiness Certificate				
CTE Careers Existing Today and Tomorrow: Furniture Designer, Facilities Architect, Virtual Showroom Coordinator, 3D Design Manager				

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CTE Career Cluster
Architecture

CTE Career Pathway
Masonry (MASO)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	IC00 Construction Core	IC11 Masonry I [^]	IC12 Masonry II* [^]	IC11 Masonry III [^] Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	IC00 Construction Core IC41 Electrical Trades I [^] IC21 Carpentry I ME11 Entrepreneurship I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Occupational Safety and Health Administration (OSHA) 10-Hour Construction Industry Credential					
CTE Careers Existing Today and Tomorrow: Independent Contractor, Blockmason, Field Services Engineer					

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CTE Career Cluster Arts, A/V Technology, & Communications				
CTE Career Pathway Adobe Academy (ADAC)				
Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	CD10 Adobe Visual Design I	CD11 Adobe Visual Design II* or CD12 Adobe Digital Design I* or CD14 Adobe Video Design I*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	MM51 Marketing CC11 Microsoft Excel^ ME11 Entrepreneurship I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Adobe Photoshop, InDesign, Illustrator, Adobe Dreamweaver, Adobe Premiere				
CTE Careers Existing Today and Tomorrow: Motion Graphics Designer, 3Dimensionalist, 3D Printer “Ink” Developer, Animation Expert				

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CTE Career Cluster
Arts, A/V Technology, & Communications

CTE Career Pathway
Adobe Video Design (AVID)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	CD14 Adobe Video Design I	CD15 Adobe Video Design II*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	MM51 Marketing CC11 Microsoft Excel^ ME11 Entrepreneurship I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Adobe Photoshop, InDesign, Illustrator, Adobe Dreamweaver, Adobe Premiere				
CTE Careers Existing Today and Tomorrow: Motion Graphics Designer, 3Dimensionalist, 3D Printer “Ink” Developer, Animation Expert				

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<p align="center">CTE Career Cluster Arts, A/V Technology, & Communications</p>					
<p align="center">CTE Career Pathway Apparel and Textile Production (ATPR)</p>					
Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major	
CTE Concentrator	CTE Major	FA31 Apparel and Textile Production I	FA32 Apparel and Textile Production II*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship	
Supplemental CTE Courses	CD10 Adobe Visual Design I CC11 Microsoft Excel^ ME11 Entrepreneurship I MI21 Fashion Merchandising				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Pre-Professional Assessment and Certification in Fashion, Textiles, and Apparel					
CTE Careers Existing Today and Tomorrow: Textile CAD Designer, Apparel Colorist, 3D Fashion Designer, Digital Fabricator, eCommerce Strategist					

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CTE Career Cluster Arts, A/V Technology, & Communications				
CTE Career Pathway Media Productions (MPRS)				
Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	CL08 Programming & Broadcasting I	CL09 Programming & Broadcasting II*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CD10 Adobe Visual Design I CD14 Adobe Video Design I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Digital Media Production Certificate, Film & Video Certificate				
CTE Careers Existing Today and Tomorrow: Video Scheduling Specialist, Master Control Operator, TV Programming Director, Streaming Service Animation Expert, Global Broadcast Operations Manager				

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CTE Career Cluster
Arts, A/V Technology, & Communications

CTE Career Pathway
3D Modeling and Animation (TDMA)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	CD20 3D Modeling and Animation I	CD21 3D Modeling and Animation II*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CD12 Adobe Digital Design I CC11 Microsoft Excel^ ME11 Entrepreneurship I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Autodesk Certified User 3DS Max, Autodesk Certified User Maya				
CTE Careers Existing Today and Tomorrow: Graphic Designer, Digital Art Director, Virtual Animation Architect, Futuristic Design Coordinator				

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CTE Career Cluster Arts, A/V Technology, & Communications				
CTE Career Pathway Game Art Design (GAAR)				
Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	CD20 3D Modeling and Animation I	CD30 Game Art Design*	CD31 Advanced Game Art Design Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CD12 Adobe Digital Design I MM51 Marketing CD21 3D Modeling and Animation II CC11 Microsoft Excel^			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Online Game Design Certificate				
CTE Careers Existing Today and Tomorrow: Developer Relations Technical Creator, 3D Game Sculptor, Marketing and Production Game Artist, Data Analytics Specialist, Mixed Reality Game Inventor				

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CTE Career Cluster
Business Management and Administration

CTE Career Pathway
Business Ethics & Law (BSEL)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	BB30 Business Ethics & Law I	BB32 Business Ethics & Law II*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	BF10 Business Essentials MM51 Marketing CC11 Microsoft Excel^			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Business Administration - Entrepreneurship Certificate			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Concepts of Entrepreneurship & Management; Venture Entrepreneurial; Expedition Entrepreneurship and Small Business				
CTE Careers Existing Today and Tomorrow: Small Business Owner, Strategic Management Professional, Social Entrepreneur, Opportunity Spotters				

CTE Career Cluster
Business Management and Administration

CTE Career Pathway
Entrepreneurship (ENTRE)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	ME11 Entrepreneurship I	ME12 Entrepreneurship II*^	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	BF10 Business Essentials MM51 Marketing CC11 Microsoft Excel^			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Business Administration - Entrepreneurship Certificate			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Concepts of Entrepreneurship & Management; Venture Entrepreneurial; Expedition Entrepreneurship and Small Business				
CTE Careers Existing Today and Tomorrow: Small Business Owner, Strategic Management Professional, Social Entrepreneur, Opportunity Spotters				

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CTE Career Cluster Business Management and Administration					
CTE Career Pathway General Management (GMGT)					
Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	BF10 Business Essentials	BB40 Business Management I or BI50 IB Business Management	BB42 Business Management II*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	BA10 Accounting I CC11 Microsoft Excel^ ME11 Entrepreneurship I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Business Administration Core Certificate Business Administration - Human Resources Management Certificate				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Fundamentals Business Concepts (ASK-BF-CERT)					
CTE Careers Existing Today and Tomorrow: Account Manager, Business Consultant, Shareability Auditor, Global Business Navigator					

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CTE Career Cluster Business Management and Administration				
CTE Career Pathway Project Management (PMGT)				
Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	GS11 Project Management I	GS12 Project Management II*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	BA10 Accounting I CC11 Microsoft Excel^ ME11 Entrepreneurship I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Business Administration Core Certificate Business Administration - Human Resources Management Certificate			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, PMI Project Management Ready				
CTE Careers Existing Today and Tomorrow: Project Administrator, Event Manager, Project Estimator, New Energy Engineer, Smart Cities Manager				

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CTE Career Cluster Education and Training				
CTE Career Pathway Teaching/Training (TETR)				
Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	FE21 Teaching as a Profession I [^]	FE22 Teach as a Profession II* [^]	FE23 Teach as a Profession Field Experience [^] FE23 focuses on a work-based learning experience.
Supplemental CTE Courses	FE60 Child Development FE11 Early Childhood Education I [^] CC11 Microsoft Excel [^]			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts - Teacher Preparation College Transfer Pathway Leading to the Associate in Science- Teacher Preparation			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Content Specific Educator’s License				
CTE Careers Existing Today and Tomorrow: Teacher, College Dean, Curriculum Developer, Superintendent, Virtual Learning Specialist, Avatar Instructor				

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CTE Career Cluster Finance				
CTE Career Pathway Accounting (ACCT)				
Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	BA10 Accounting I	BA20 Accounting II*^	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel^ BF10 Business Essentials ME11 Entrepreneurship I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree Accounting and Finance - Tax Preparation Certificate			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Microsoft Office 2016 Excel Expert 77-726; Intuit QuickBooks Certified User				
CTE Careers Existing Today and Tomorrow: Certified Public Accountant, Tax Supervisor, Financial Accounting Director, Currency Adoption Specialist, Anonymity Advocates				

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CTE Career Cluster Finance					
CTE Career Pathway Financial Securities and Investments (FNLP)					
Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	BF10 Business Essentials	BF21 Financial Planning I	BF22 Financial Planning II*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel^ ME11 Entrepreneurship I CS20 Computer Science I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Fundamentals Business Concepts (ASK-BF-CERT)					
CTE Careers Existing Today and Tomorrow: Financial Planner, Stockbroker, Crypto Currency Banker, Currency Adoption Specialist					

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CTE Career Cluster Health Science					
CTE Career Pathway Healthcare Professional (HPCP)					
Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	HU40 Health Science I	HU42 Health Science II*	HN43 Nursing Fundamentals and Practicum^ (2 credit course)	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel^ ME11 Entrepreneurship I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree Associate Degree in Nursing, ADN Pathway				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Stop the Bleed, First Aid, OSHA 10-Hour General Industry (Healthcare) Certification, North Carolina Nurse Aide I					
CTE Careers Existing Today and Tomorrow: Registered Nurse Aid, Healthcare Implementation Consultant, Cradle to Grave Lifecycle Manager, Genetic Modification Designer, Organ Agent					

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CTE Career Cluster
Hospitality & Tourism

CTE Career Pathway
Culinary Arts Applications (CULA)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	FH10 Culinary Arts & Hospitality I	FH11 Culinary Arts & Hospitality II Applications	FH13 Culinary Arts & Hospitality III*^	FH14 Culinary Arts & Hospitality IV Applications^ Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel^ ME11 Entrepreneurship I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Culinary Arts Certificate				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Certified Food Protection Manager (ANSI-Accredited), Certified Fundamental Cook, American Culinary Federation Culinary Arts Pre-PAC, American Association of Family & Consumer Sciences, ProStart Certificate of Achievement, National Restaurant Association Education Foundation					
CTE Careers Existing Today and Tomorrow: Culinary Operations Director, Sous Chef, Catering Coordinator, 3D Food Printer Chef					

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CTE Career Cluster
Hospitality & Tourism

CTE Career Pathway
Culinary Arts Internship (CULI)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	FH10 Culinary Arts & Hospitality I	FH12 Culinary Arts & Hospitality II Internship	FH13 Culinary Arts & Hospitality III*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel^ ME11 Entrepreneurship I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Certified Food Protection Manager (ANSI-Accredited), Certified Fundamental Cook, American Culinary Federation Culinary Arts Pre-PAC, American Association of Family & Consumer Sciences, ProStart Certificate of Achievement, National Restaurant Association Education Foundation					
CTE Careers Existing Today and Tomorrow: Culinary Specialist, Executive Chef, Cuisine Supervisor; Automated Meal Delivery Planner, Drone Food Manager					

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CTE Career Cluster
Hospitality & Tourism

CTE Career Pathway
Sport & Event Marketing (SEMK)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	MH31 Sport & Event Marketing I	MH32 Sport & Event Marketing II*^	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	ME11 Entrepreneurship I CC11 Microsoft Excel^ BF10 Business Essentials			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Customer Service and Sales Certification, Advanced Customer Service and Sales Certification, Fundamental Marketing Concepts				
CTE Careers Existing Today and Tomorrow: International Marketing Manager, Communications & Events Specialist, Super Athlete Designer, Global Entertainment Strategist				

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CTE Career Cluster Hospitality & Tourism				
CTE Career Pathway Travel & Tourism (TRTO)				
Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	FH31 Hospitality and Tourism I	FH32 Hospitality and Tourism II*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	ME11 Entrepreneurship I CC11 Microsoft Excel^ CS20 Computer Science I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Certified Guest Service Professionals (CGSP), Advanced Customer Service and Sales Certification, Fundamental Marketing Concepts				
CTE Careers Existing Today and Tomorrow: Hospitality Information Specialist, Hotel Food & Beverage Manager, Revenue Analyst; Virtual Travel Advisor				

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CTE Career Cluster Human Services				
CTE Career Pathway Counseling and Mental Health (CMHC)				
Pathway Completer		CTE Course 9 th Grade or 10 th Grade	CTE Course 10 Grade or 11 th Grade	CTE Career Pathway Course 12 th Grade
CTE Concentrator	CTE Major	FC13 Counseling and Mental Health I	FC14 Counseling and Mental Health II*	Work-Based Learning: CTE Apprenticeship or CTE Internship
Supplemental CTE Courses	HU40 Health Science I HU42 Health Science II (The above supplemental courses should be taken in sequential order.)			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree			
CTE Industry Recognized Credentials: Stop the Bleed; CPR/AED; First Aid; OSHA 10-Hr. General Industry (Healthcare) Certification				
CTE Careers Existing Today and Tomorrow: Behavioral Health Specialist, Outpatient Therapist, Psychologist, Sociologist, Quantified Self-Assessment Auditor				

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CTE Career Cluster

Human Services

CTE Career Pathway

Early Childhood Development & Services (EACH)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	FE60 Child Development	FE11 Early Childhood Education I*^ (2 credit course)	FE12 Early Childhood Education II^ (2 credit course) Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel^ BF10 Business Essentials ME11 Entrepreneurship I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Early Childhood Education Certificate			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, CPR, First Aid, NC Early Childhood Credential Equivalency				
CTE Careers Existing Today and Tomorrow: Human Services Clinician, Child Psychiatrist, Nutrition Consultant, Health & Human Services Professional, Deficiency Analyzer, Data Contextualist, Precision Education Specialist				

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CTE Career Cluster Information Technology					
CTE Career Pathway Cisco Network Engineering (CNEN)					
Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major	
CTE Concentrator	CTE Major	CI10 Cisco Network Engineering Technology I [^]	CI11 Cisco Network Engineering Technology II ^{*^}	CL62 Cisco Network Engineering Technology III Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship	
Supplemental CTE Courses	CI00 CompTIA IT Fundamentals CC11 Microsoft Excel [^] ME11 Entrepreneurship I CS20 Computer Science I T				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Information Technology - Cisco Network Administration Certificate				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, CompTIA IT Fundamentals (FCO-U61), Cisco Certified Entry Networking Technician (CCENT), Microsoft MTA 98-366 (Networking Fundamentals)					
CTE Careers Existing Today and Tomorrow: Data Center Network Engineer, Network Security Engineer, Sensor Inventor, Sensor Designer, Sensor Engineer					

***Denotes CTE Concentrator Course**

[^]Denotes CTE Inherently Honors Course

CTE Career Cluster Information Technology					
CTE Career Pathway Computer Engineering (COEN)					
Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	CI00 CompTIA IT Fundamentals	CI01 Computer Engineering Technology I [^]	CI02 Computer Engineering Technology II ^{*^}	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel [^] BF10 Business Essentials ME11 Entrepreneurship I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, CompTIA IT Fundamentals (FCO-U61), CompTIA A+ 1001, CompTIA IT Fundamentals, CompTIA A+ 1002 MTA 98-349 Operating System Fundamentals					
CTE Careers Existing Today and Tomorrow: Cybersecurity Sales Engineer, Embedded Software Application Engineer, Data Transmission Optimizer					

*Denotes CTE Concentrator Course

[^]Denotes CTE Inherently Honors Course

CTE Career Cluster Information Technology				
CTE Career Pathway Computer Science Principles (CSPR)				
Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	CS20 Computer Science I	0A02 AP Computer Science Principals* or CS21 Computer Science II*	2A02 AP Computer Science A Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CI00 CompTIA IT Fundamentals CC11 Microsoft Excel^ ME11 Entrepreneurship I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, MTA 98-381 Introduction to Programming Using Python				
CTE Careers Existing Today and Tomorrow: Software Developer, Intellectual Property Associate, Data Stream Organizer				

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

CTE Career Cluster Information Technology				
CTE Career Pathway Python Programming (PYPR)				
Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	CP10 Python Programming I	CP11 Python Programming II*^	2A02 AP Computer Science Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CI00 CompTIA IT Fundamentals CC11 Microsoft Excel^ CP20 Develop in Swift Explorations			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, MTA 98-381 Introduction to Programming Using Python				
CTE Careers Existing Today and Tomorrow: Software Programmer, Virtual Property Associate, Automated Traffic Architect, Failure Point Assessor				

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

CTE Career Cluster Information Technology					
CTE Career Pathway Swift Development Career Pathway (SDCP)					
Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	CP20 Development in Swift Explorations	CP21 Development in Swift Explorations*^	CP22 Develop in Swift Data Collections	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	OA02 AP Computer Science CI00 CompTIA IT Fundamentals CC11 Microsoft Excel^ ME11 Entrepreneurship I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Information Technology - Mobile Device Development Certificate				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, App Development with Swift Certified User					
CTE Careers Existing Today and Tomorrow: Software Analyst, Apple App Store Creator, Automation Engineer, Computer Personality Designers, Smart Contact App Developers, Avatar Designer					

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

CTE Career Cluster Law, Public Safety, Corrections & Security					
CTE Career Pathway Emergency Management (EMMG)					
Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	IP11 Public Safety I	IP51 Emergency Management I*	IP52 Emergency Management II^	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	HU40 Health Science I CC11 Microsoft Excel^ BF10 Business Essentials				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, NC Emergency Management I Certification, National Incident Management System, Community Emergency Response Team (C.E.R.T.) Certification					
CTE Careers Existing Today and Tomorrow: Public Safety Telecommunicator, Public Safety Risk Manager; Disaster Preparedness and Response Coordinator					

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

CTE Career Cluster

Law, Public Safety, Corrections & Security

CTE Career Pathway

Emergency Medical Technology (EMMT)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	IP21 Emergency Medical Technology I	IP22 Emergency Medical Technology II*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	HU40 Health Science I CC11 Microsoft Excel^ BF10 Business Essentials			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, NC Emergency Management I Certification, National Incident Management System, Community Emergency Response Team (C.E.R.T.) Certification				
CTE Careers Existing Today and Tomorrow: Public Safety Telecommunicator, Public Safety Risk Manager; Disaster Preparedness and Response Coordinator				

<p align="center">CTE Career Cluster Law, Public Safety, Corrections & Security</p>						
<p align="center">CTE Career Pathway Firefighter Technology (FIFI)</p>						
Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major	
CTE Concentrator	CTE Major	IP31 Firefighter Technology I	IP32 Firefighter Technology II*	IP33 Firefighter Technology III^	IP51 Emergency Management I Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship	
Supplemental CTE Courses	IP11 Public Safety I HU40 Health Science I CC11 Microsoft Excel^ BF10 Business Essentials					
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Fire Protection Technology Certificate					
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, NC Office of State Fire Marshal (NCOSFM) - Firefighter Technology I, NC Office of State Fire Marshal (NCOSFM) - Firefighter Technology II, NC Office of State Fire Marshal (NCOSFM) - Firefighter Technology III						
CTE Careers Existing Today and Tomorrow: Public Safety Telecommunicator, Public Safety Risk Manager; Disaster Preparedness and Response Coordinator						

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

CTE Career Cluster
Law, Public Safety, Corrections & Security

CTE Career Pathway
Law and Justice (LAWJ)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	IP41 Law and Justice I	IP42 Law and Justice II*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	IP11 Public Safety I CC11 Microsoft Excel^			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, National Law Enforcement Certification for Secondary & Post-Secondary Students (SPSS), Certified Protection Officer (CPO)				
CTE Careers Existing Today and Tomorrow: Police Officer, Criminologist, Magistrate, Chief Exolawyer, Data Detective				

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

CTE Career Cluster Law, Public Safety, Corrections & Security				
CTE Career Pathway Public Safety (PSPW)				
Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	IP11 Public Safety I	IP12 Public Safety II*^	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	IP51 Emergency Management I CC11 Microsoft Excel^ BF10 Business Essentials			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Criminal Justice Technology - Criminal Justice Foundations Certificate			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Certified Public Safety Executive, Public Safety Communications Certificate				
CTE Careers Existing Today and Tomorrow: Central Intelligence Agency Supervisor, Planetary Protection Officer, Prison System Dismantlers, Driverless Operating System Traffic Controller				

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

CTE Career Cluster Manufacturing					
CTE Career Pathway Electronics (ELEC)					
Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	IK88 Electronics I	IK89 Electronics II*	IK90 Electronics III	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel^ BF10 Business Essentials CS20 Computer Science I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Electronics Engineering Technology - Basic Electronics Certificate				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Electronics Technicians Association Certification: EM1, EM4, & EM2					
CTE Careers Existing Today and Tomorrow: Electronics Engineering Technician, Electronics Repair Specialist, Fusion System Integrator, Sensor Signal Engineer					

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

CTE Career Cluster Manufacturing				
CTE Career Pathway Metals Manufacturing (MEMA)				
Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	IM41 Metals Manufacturing Technology I	IM42 Metals Manufacturing Technology II*	IM43 Metals Manufacturing Technology III^ Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel^ ME11 Entrepreneurship I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Manufacturing Technology Apprenticeship Certificate Welding Technology Diploma Welding Technology - Robot Operator Certificate Welding Technology Certificate Welding Technology in Manufacturing Certificate			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, NIMS Measurement-Materials and Safety, NIMS Job Planning-Benchwork and Layout, NIMS Milling I				
CTE Careers Existing Today and Tomorrow: Welder, Automation Auditor, Manufacturing Technology Engineer, Futuristic Metals Designer, Aquatic Welder				

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^Denotes CTE Inherently Honors Course

CTE Career Cluster Manufacturing				
CTE Career Pathway Woodworking (WOWO)				
Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	IM21 Woodworking I	IM22 Woodworking II*^	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	IC00 Construction Core CC11 Microsoft Excel^ ME11 Entrepreneurship I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate				
CTE Careers Existing Today and Tomorrow: Corrugator Supervisor, Engineered Wood Designer, Finishing Manager				

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

**CTE Career Cluster
Marketing**

**CTE Career Pathway
Marketing Management (MMGT)**

Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	MM51 Marketing I	MM52 Marketing II*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CD10 Adobe Visual Design I BF10 Business Essentials CC11 Microsoft Excel^			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Customer Service and Sales Certification, Advanced Customer Service and Sales Certification, Fundamental Marketing Concepts				
CTE Careers Existing Today and Tomorrow: Inbound Marketing Specialist, Email Marketing Manager, Branding Specialist, Social Media Advertising Supervisor, Direct Consumer Consultant				

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

CTE Career Cluster Marketing				
CTE Career Pathway Sales (PRSM)				
Pathway Completer		CTE Course 1	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	MI31 Sales I	MI32 Sales II*	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	MM51 Marketing BF10 Business Essentials CS20 Computer Science I CC11 Microsoft Excel^			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Business Administration - Sales Certificate			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate				
CTE Careers Existing Today and Tomorrow: Remote Sales Manager, Technical Sales Coordinator, Virtual Product Sales Advisor				

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

CTE Career Cluster
Science, Technology, Engineering & Mathematics

CTE Career Pathway
Drafting Engineering (DREN)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major
CTE Concentrator	CTE Major	IC61 Drafting I [^]	IV22 Drafting II – Engineering* [^]	IV23 Drafting III – Engineering [^] Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel [^] ME11 Entrepreneurship I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree			
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Autodesk Certified User AutoCAD, Autodesk Certified User Inventor, Certified SolidWorks Associate (CSWA), Autodesk Cert Professional Inventor OR Certified SolidWorks Professional (CSWP)				
CTE Careers Existing Today and Tomorrow: Computer Aided Designer, Hospital and Healthcare Dismantler, Geoengineer, Mass Energy Storage Developers				

*Denotes CTE Concentrator Course

[^]Denotes CTE Inherently Honors Course

CTE Career Cluster Science, Technology, Engineering & Mathematics					
CTE Career Pathway Engineering Technologies (ETEC)					
Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	CL44 Engineering Technology I	CL45 Engineering Technology II*	CL46 Engineering Technology III	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	MM51 Marketing CC11 Microsoft Excel^				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Civil Engineering Technology - Geomatics Technology Certificate				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Data Mining & Analytics Certification, Certified Engineering Technologist (CT)					
CTE Careers Existing Today and Tomorrow: Mechanical Engineer, Industrial Engineer, Avionics Engineer, Heavy Air Engineers, Construction Material Designers					

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^Denotes CTE Inherently Honors Course

CTE Career Cluster
Transportation, Distribution & Logistics

CTE Career Pathway
Automotive Services (AUTO)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	IT11 Automotive Service Fundamentals	IT16 Automotive Service I	IT17 Automotive Service II*^	IT18 Automotive Service III^ Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	IT30 Collision Repair Fundamentals CC11 Microsoft Excel^ ME11 Entrepreneurship I CS20 Computer Science I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Automotive Systems Technology Diploma Automotive Systems Technology - Brakes Certificate Automotive Systems Technology - General Option Certificate Automotive Systems Technology - Undercar Certificate				

CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, ASE Entry-Level Certification Maintenance and Light Repair; ASE Entry-Level Certification-Brakes; ASE Auto Maintenance and Light Repair Certification (G1); ASE Entry-Level Certification- Electrical/Electronic Systems

CTE Careers Existing Today and Tomorrow: Automotive Technician, Traffic Transitionists, Drone Repair Technician, Process Automation Auditor

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CTE Career Cluster Transportation, Distribution & Logistics					
CTE Career Pathway Aviation (AVIA)					
Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	IK61 Aerospace Technology I	IK62 Aerospace Technology II*	IK30 Aviation Manufacturing	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	IT11 Automotive Service Fundamentals IC61 Drafting I [^] ID10 Drone Technology Fundamentals CS20 Computer Science I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Aerospace Manufacturing Technology - Aircraft Structures Assembly & Repair Diploma Aviation Electronics (Avionics) Technology Diploma Aviation Management and Career Pilot Technology Diploma Aviation Systems Technology, Airframe Diploma (Spring) Aviation Systems Technology, Powerplant Diploma (Fall) Aviation Systems Technology, General Certificate				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, Airframe & Powerplant (A&P) Certified Technician, Aviation Maintenance Technician (AMT) Certificate					
CTE Careers Existing Today and Tomorrow: Aviation Technician, Experimental Test Pilot, Aviation Safety Inspector, Avionics Engineer, Drone Repair Expert					

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[^]Denotes CTE Inherently Honors Course

CTE Career Cluster Transportation, Distribution & Logistics					
CTE Career Pathway Collision Repair (COLL)					
Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	IT30 Collision Repair Fundamentals	IT31 Collision Repair I	IT32 Collision Repair II - Non-Structural* [^] or IT33 Collision Repair II - Refinishing* [^]	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel [^] ME11 Entrepreneurship I CS20 Computer Science I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Collision Repair & Refinishing Technology Diploma Collision Repair & Refinishing Technology Certificate				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, S/P2 Collision Repair and Refinish - Pollution Prevention S/P2 Collision Repair and Refinish Safety, I-CAR Platinum- Non-Structural Technician, ASE Entry Level Painting/Refinishing OR Platinum ProLevel 1 Refinishing					
CTE Careers Existing Today and Tomorrow: Body Shop Repair Technician, Digital Refinishing Processor, eVTOL Designer					

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[^]Denotes CTE Inherently Honors Course

CTE Career Cluster Transportation, Distribution & Logistics					
CTE Career Pathway Diesel Technology (DISL)					
Pathway Completer		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Concentrator	CTE Major	IL50 Diesel Technology I	IL51 Diesel Technology II*	IL52 Diesel Technology III	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	BF10 Business Essentials CC11 Microsoft Excel^ ME11 Entrepreneurship I CS20 Computer Science I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Diesel & Heavy Equipment Technology Certificate				
CTE Industry Recognized Credentials: WorkKeys National Career Readiness Certificate, ASE Technician Certification in Truck Equipment (E1-E3) and Medium and Heavy Truck (T1-T8)					
CTE Careers Existing Today and Tomorrow: Diesel Technician, Heavy Equipment Operator, Paving/Surface Equipment Operators, Self-Driving Truck Mechanic					

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

Career Clusters & Career Pathways

CTE Course Sequence Guide

Signature Career Academies



Signature Career Academy of Biomedical Technology and Specialized Health Sciences

Location: The Academy at Smith



CTE Career Cluster Health Science					
CTE Career Pathway PLTW Biotechnology Research and Development (PLWB)					
Pathway Completer		CTE Courses 9 th Grade	CTE Course 10 th Grade	CTE Course 11 th Grade	CTE Career Pathway Course 12 th Grade
CTE Concentrator	CTE Major	HP70 PLTW Principles of Biomedical Sciences [^]	HP71 PLTW Human Body Systems [^]	HP72 PLTW Medical Interventions* [^]	HP73 PLTW Biomedical Innovations [^] Work-Based Learning: CTE Apprenticeship or CTE Internship
Supplemental CTE Courses	HU40 Health Science I HU42 Health Science II (The above supplemental courses should be taken in sequential order.)				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree				
CTE Industry Recognized Credentials: CPR/AED; First Aid; Stop the Bleed; OSHA 10-Hour General Industry (Healthcare) Certification					
CTE Careers Existing Today and Tomorrow: Genetics Expert, Super Baby Designer, Body Modification Ethicist, Clone Rancher, Lip Designer					

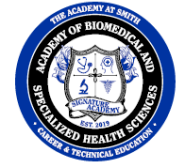
*Denotes CTE Concentrator Course

[^]Denotes CTE Inherently Honors Course

Signature Career Academy of Biomedical Technology and Specialized Health Sciences

Location: The Academy at Smith

<p align="center">CTE Career Cluster Health Science</p> <hr/> <p align="center">CTE Career Pathway Pharmacy Technician (PHTC)</p>					
Pathway Completer		CTE Course 9 th Grade	CTE Course 10 th Grade	CTE Course 11 th Grade	CTE Career Pathway Course 12 th Grade
CTE Concentrator	CTE Major	HU40 Health Science I	HU42 Health Science II*	HL17 Pharmacology Fundamentals I	<p align="center">HH32 Pharmacy Technician[^]</p> <p align="center">Work-Based Learning: CTE Apprenticeship or CTE Internship</p>
Supplemental CTE Courses	<p align="center">HP70 PLTW Principles of Biomedical Sciences HP71 PLTW Human Body Systems HP72 PLTW Medical Interventions (The above supplemental courses should be taken in sequential order.)</p>				
Career & College Promise	<p align="center">Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree</p>				
<p>CTE Industry Recognized Credentials: Stop the Bleed; CPR/AED; First Aid; OSHA 10-Hr. General Industry (Healthcare) Certification; North Carolina Nurse Aide I; CphT Certified Pharmacy Technician</p>					
<p>CTE Careers Existing Today and Tomorrow: Registered Nurse Aid; Pharmacy Technician, Healthcare Implementation Consultant, Cradle to Grave Lifecycle Manager, Genetic Modification Designer, Organ Agent</p>					

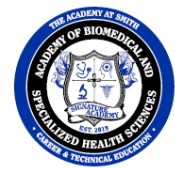


*Denotes CTE Concentrator Course

[^]Denotes CTE Inherently Honors Course

Signature Career Academy of Biomedical Technology and Specialized Health Sciences

Location: The Academy at Smith



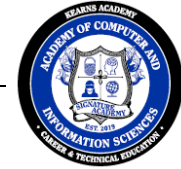
CTE Career Cluster Human Services				
CTE Career Pathway Counseling and Mental Health (CMHC)				
Pathway Completer		CTE Course 9 th Grade or 10 th Grade	CTE Course 10 Grade or 11 th Grade	CTE Career Pathway Course 12 th Grade
CTE Concentrator	CTE Major	FC13 Counseling and Mental Health I	FC14 Counseling and Mental Health II*	Work-Based Learning: CTE Apprenticeship or CTE Internship
Supplemental CTE Courses	HU40 Health Science I HU42 Health Science II (The above supplemental courses should be taken in sequential order.)			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree			
CTE Industry Recognized Credentials: Stop the Bleed; CPR/AED; First Aid; OSHA 10-Hr. General Industry (Healthcare) Certification				
CTE Careers Existing Today and Tomorrow: Behavioral Health Specialist, Outpatient Therapist, Psychologist, Sociologist, Quantified Self-Assessment Auditor				

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

Signature Career Academy of Computer and Information Science

Location: Kearns Academy



CTE Career Cluster Information Technology					
CTE Career Pathway Cybersecurity (CBSY)					
Pathway Completer		CTE Course 9 th Grade	CTE Course 10 th Grade	CTE Course 11 th Grade	CTE Career Pathway Course 12 th Grade
CTE Concentrator	CTE Major	CI35 PLTW Cybersecurity^	CI30 Cybersecurity I	CI31 Cybersecurity II*^	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op) or CTE Internship
Supplemental CTE Courses	CS20 Computer Science I CS21 Computer Science Principles II or OA02 AP Computer Science Principles CI00 CompTIA IT Fundamentals (The above supplemental courses should be taken in sequential order.)				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Cyber Crime and Digital Forensics Certificate				
CTE Industry Recognized Credentials: CompTIA IT Fundamentals; CompTIA A+ 1001; CompTIA Security+; Certified Cybersecurity Assoc-PCCSA					
CTE Careers Existing Today and Tomorrow: Cybersecurity Sales Engineer, Embedded Software Application Engineer, Information Technology Specialist, Cloud Security Operations Engineer					

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

Signature Career Academy of Computer and Information Science

Location: Kearns Academy



CTE Career Cluster
Information Technology

CTE Career Pathway
Artificial Intelligence (AI)

Pathway Completer		CTE Course 9 th Grade	CTE Course 10 th Grade	CTE Course 11 th Grade	CTE Career Pathway Course 12 th Grade
CTE Concentrator	CTE Major	CC11 Microsoft Excel [^]	CP10 Python Programming or CS30 Introduction to Data Science	CP11 Python Programming II* or CS31 SAS Base Programming*	CA10 Artificial Intelligence I Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op) or CTE Internship
Supplemental CTE Courses	CS21 Computer Science Principles II or OA02 AP Computer Science Principles CI00 CompTIA IT Fundamentals (The above supplemental courses should be taken in sequential order.)				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree				
CTE Industry Recognized Credentials: MTA 98-381 Introduction to Programming Using Python; Artificial Intelligence Engineering (AIE)					
CTE Careers Existing Today and Tomorrow: Software Developer, Intellectual Property Associate, Application Development Leader, Machine Learning Engineer, Robotic Earthworm Drivers					

*Denotes CTE Concentrator Course

[^]Denotes CTE Inherently Honors Course

Signature Career Academy of Computer and Information Science

Location: Northeast HS



<p align="center">CTE Career Cluster Information Technology</p> <hr/> <p align="center">CTE Career Pathway Cybersecurity (CBSY)</p>					
Pathway Completer		CTE Course 9 th Grade	CTE Course 10 th Grade	CTE Course 11 th Grade	CTE Career Pathway Course 12 th Grade
CTE Concentrator	CTE Major	CS20 Computer Science I	CI35 PLTW Cybersecurity^	CI30 Cybersecurity I	CI31 Cybersecurity II*^ Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op) or CTE Internship
Supplemental CTE Courses	CS21 Computer Science Principles II or OA02 AP Computer Science Principles CIO0 CompTIA IT Fundamentals (The above supplemental courses should be taken in sequential order.)				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Cyber Crime and Digital Forensics Certificate				
CTE Industry Recognized Credentials: CompTIA IT Fundamentals; CompTIA A+ 1001; CompTIA Security+; Certified Cybersecurity Assoc-PCCSA					
CTE Careers Existing Today and Tomorrow: Cybersecurity Sales Engineer, Embedded Software Application Engineer, Intellectual Property Associate, Data Stream Organizer					

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

Signature Career Academy of Computer and Information Science

Location: Northeast HS



<p align="center">CTE Career Cluster Information Technology</p> <hr/> <p align="center">CTE Career Pathway Artificial Intelligence (AI)</p>					
Pathway Completer		CTE Course 9 th Grade	CTE Course 10 th Grade	CTE Course 11 th Grade	CTE Career Pathway Course 12 th Grade
CTE Concentrator	CTE Major	CS20 Computer Science I	CA10 Artificial Intelligence I	CP20 Develop in Swift Explorations	CP21 Develop in Swift Fundamentals Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op) or CTE Internship
Supplemental CTE Courses	CS21 Computer Science Principles II or OA02 AP Computer Science Principles CI00 CompTIA IT Fundamentals CP10 Python Programming I (The above supplemental courses should be taken in sequential order.)				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree				
CTE Industry Recognized Credentials: MTA 98-381 Introduction to Programming Using Python; Artificial Intelligence Engineering (AIE)					
CTE Careers Existing Today and Tomorrow: Software Developer, Intellectual Property Associate, Analytics Expert, Sustainability Integration Expert, Robotic Earthworm Drivers					

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

Signature Career Academy of Advanced Manufacturing and Engineering

Location: Ben L. Smith HS



CTE Career Cluster Science, Technology, Engineering & Mathematics					
CTE Career Pathway PLTW Engineering (PLWE)					
Pathway Completer		CTE Course 9 th Grade	CTE Course 10 th Grade	CTE Course 11 th Grade	CTE Career Pathway Course 12 th Grade
CTE Concentrator	CTE Major	CE10 PLTW Introduction to Engineering Design	CE11 PLTW Principles of Engineering	CE18 PLTW Environmental Sustainability* or CE17 PLTW Computer Integrated Manufacturing*	CE16 PLTW Capstone Work-Based Learning: CTE Apprenticeship or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel^ ME11 Entrepreneurship I BF10 Business Essentials CS20 Computer Science I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Computer Integrated Machining Diploma				
CTE Industry Recognized Credentials: OSHA 10-Hour Industry Certification (optional credential offered anytime)					
CTE Careers Existing Today and Tomorrow: Mechanical Engineer, CAD Designer, Product Developer; Systems Transitionists, Efficiency Optimizer, Mass Energy Storage Developer					

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

Signature Career Academy of Advanced Manufacturing and Engineering

Location: Ben L. Smith HS



CTE Career Cluster

Manufacturing

CTE Career Pathway

Advanced Manufacturing (ADMA)

Pathway Completer		CTE Course 1	CTE Course 2	CTE Career Pathway Major Course
CTE Concentrator	CTE Major	IM11 Advanced Manufacturing I	IM12 Advanced Manufacturing II*	TR13 SREB AC Mechatronic Systems for Advanced Production Work-Based Learning: CTE Apprenticeship or CTE Internship
Supplemental CTE Courses	CC11 Microsoft Excel^ ME11 Entrepreneurship I BF10 Business Essentials CS20 Computer Science I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Mechatronics Engineering Technology Entry Level Technician Certificate			
CTE Industry Recognized Credentials: NI Certified LabVIEW Associate Developer (CLAD); OSHA 10-Hour Industry Certification (optional credential offered anytime)				
CTE Careers Existing Today and Tomorrow: Electrical Engineer, Automation Engineer, Ceramics and Optical Expert, Mechatronics Hardware Engineer				

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

Signature Career Academy of Transportation, Distribution, and Logistics

Location: Western Guilford HS



CTE Career Cluster Transportation, Distribution & Logistics				
CTE Career Pathway Drone Technology (DRON)				
Pathway Completer	CTE Course 9 th Grade	CTE Course 10 th Grade	CTE Course 11 th Grade	CTE Career Pathway Course 12 th Grade
CTE Concentrator	ID10 Drone Technology Fundamentals	CS20 Computer Science I	ID11 Drone Technology I	ID12 Drone Technology II* Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
Supplemental CTE Courses	BP14 Python Programming I CC11 Microsoft Excel^ ME11 Entrepreneurship I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree			
CTE Industry Recognized Credentials: CFR (FAA) 14 Part 107 UAS Remote Pilot Certification, NCDOT NC UAS Operator Permit, Esri Drone2Map, NFPA 2400, USI Visual Line of Sight Systems Operations (VSO)				
CTE Careers Existing Today and Tomorrow: Drone Engineer, Drone Docking Designer, Operator Certification Specialist, Drone Traffic Optimizer				

*Denotes CTE Concentrator Course

^Denotes CTE Inherently Honors Course

Signature Career Academy of Transportation, Distribution, and Logistics

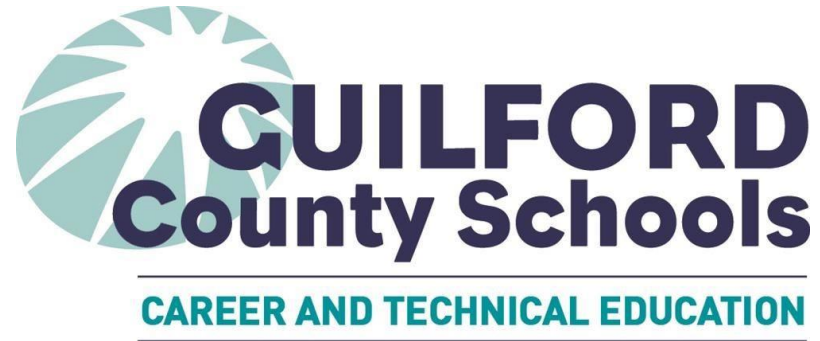
Location: Western Guilford HS



<p align="center">CTE Career Cluster Transportation, Distribution & Logistics</p>					
<p align="center">CTE Career Pathway Global Logistics & Supply Chain Management (GLSC)</p>					
Pathway Completer		CTE Course 9 th Grade	CTE Course 10 th Grade	CTE Course 11 th Grade	CTE Career Pathway Course 12 Grade
CTE Concentrator	CTE Major	IE41 SREB AC Introduction to Logistics [^]	IE42 SREB AC Functional Areas in Logistics* [^]	IE43 SREB AC Global Logistics Management [^]	IE44 SREB AC Logistics and Supply Chain Management [^] Work-Based Learning: CTE Apprenticeship or CTE Internship
Supplemental CTE Courses	ID10 Drone Technology Fundamentals CS20 Computer Science Principles I CC11 Microsoft Excel [^] ME11 Entrepreneurship I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Supply Chain Management Diploma Supply Chain Management - SAP Certificate Supply Chain Management Certificate				
CTE Industry Recognized Credentials: OSHA Forklift Certification, Certified Technician-Supply Chain Automation (CTSCA): CTSCA-EM Equipment Maintenance, CTSCA-ER Equipment Repair, CTSCA-NR Network Repair					
CTE Careers Existing Today and Tomorrow: Trade Compliance Supervisor, Logistics Engineer, Supply Chain Manager, Transportation Manager, Automated Traffic Architect, Driverless Operating System Engineer					

*Denotes CTE Concentrator Course

[^]Denotes CTE Inherently Honors Course



BRIDGING EDUCATION & INDUSTRY