

**CAREER AND TECHNICAL EDUCATION** 

# Career Clusters & Career Pathways CTE Course Sequence Guide

"The Ultimate Classroom Experience"

## **GCS CTE Career Clusters & Career Pathways**

### **Table of Contents**

Agricultural, Food and Natural Resources	2 – 3	Human Services	28 – 29
Architecture	4 – 9	Information Technology	30 – 34
Arts, A/V Technology, & Communications	10 - 15	Law, Public Safety, Corrections & Security	35 – 39
Business Management & Administration	16 – 19	Manufacturing	40 – 42
Education & Training	20	Marketing	43 – 44
Finance	21 – 22	Science, Technology, Engineering, & Math	45 – 46
Health Science	23	Transportation, Distribution & Logistics	47 – 50
Hospitality & Tourism	24 – 27	Signature Career Academies	51 – 62

			CTE Career Pathway	
			Animal Science (ANSC)	
Pathwa Comple			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) Pa e Transfer Pathway Leading to the Associate in Sci	•

			<b>CTE Career Cluster</b> Agricultural, Food and Natural Resources	
			CTE Career Pathway Plant Systems (PLSV)	
Pathw Comple				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) Pathw Turfgrass Management Technology Certificate	ау:
CTE Ind	ustry	Recognized Credentials: WorkKeys N	ational Career Readiness Certificate, NC Private Pesticide A	oplicator
CTE Car	eers I	Existing Today and Tomorrow: Landso	aper, Global System Architect, Fear Containment Manager	

			Architecture CTE Career Pathwa	v	
			Carpentry (CARP)		
Pathw Comple	-	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 Exc IC41 Electrical Trade ME11 Entrepreneurs	s  ^	
Career & College Promise			Recommended Career & College Pro College Transfer Pathway Leading to the		
		•	ational Career Readiness Certificate, OSH/ try I, NC NCCER Credential - Carpentry II, I		tifications, NC NCCER Credent

			CTE Career Cluster Architecture		
			CTE Career Pathway		
			Drafting Architectural (DI	RFA)	
Pathw Comple		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			Fl21 Interior Design Fundar CC11 Microsoft Excel ME11 Entrepreneurshi	^	
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree				
	-	Recognized Credentials: WorkKey ified Professional Revit	National Career Readiness Certificate, Autode	esk Certified User AutoCAD, Autodesk Ce	ertified User Revit,

			<b>CTE Career Cl</b> Architectu		
			CTE Career Pat	•	
Pathw	av		Electrical Trades	· · ·	
Comple		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 Micros ME11 Entrepr		
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: <u>Electrical Systems Technology - Wiring Certificate</u>				
Constru	iction (	Core, NC NCCER Credential - Elect	•	on, WorkKeys National Career Readiness ectrical Trades II, NC NCCER Credential - E	-

			CTE Career Clus Architecture		
		F	<b>CTE Career Path</b> leating, Ventilation, AC, & Refi	•	
Pathw Comple		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 ME11 Entrepren		
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: <u>Air Conditioning, Heating, and Refrigeration Technology - Basic Air Conditioning Certificate</u>				
		-	ys National Career Readiness Certificate, ( fication – HVACR I, NCCER Certification – I	Dccupational Safety and Health Administra HVACR II	ation (OSHA) 10-Hour
<b>CTE Ca</b> i Appliar			ommercial HVAC Technician, HVAC Project	: Manager, Controller, Robot Sherpa Opera	ations Manager, IoT Smart

			Architecture		
			CTE Career Pathway		
			Interior Design (INDE)		
Pathw Comple		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			<u>ee</u>	

			reer Pathway	
y er	CTE Course 1	Maso CTE Course 2	CTE Course 3	CTE Career Pathway Major
CTE Major	IC00 Construction Core	IC11 Masonry IA	IC12 Masonry II*^	IC11 Masonry III^ Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
IC00 Construction Core IC41 Electrical Trades I^ IC21 Carpentry I ME11 Entrepreneurship I				
e	Major	Er CTE Course 1	CTE Course 1 CTE Course 2   IC00 Construction Core IC11 Masonry I^   IC00 Construction Core IC11 Masonry I^	CTE Course 1 CTE Course 2 CTE Course 3   IC00 Construction Core IC11 Masonry I^ IC12 Masonry II*^   IC00 Construction Core IC11 Masonry I^ IC12 Masonry II*^   IC00 Construction Core IC00 Construction Core IC141 Electrical Trades I^   IC12 Carpentry I IC12 Carpentry I

			s, A/V Technology, & Communication	
			CTE Career Pathway Adobe Academy (ADAC)	
Pathw Comple	/ay 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 Career Pathway	
			Adobe Video Design (AVID)	
Pathw Comple		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			•

		AI (3)	A/V Technology, & Communication	15
			CTE Career Pathway	
		Ар	parel and Textile Production (ATPR)	
Pathw Comple		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			

		Arts, A/	<b>CTE Career Cluster</b> V Technology, & Communications		
			CTE Career Pathway Media Productions (MPRS)		
Pathw Comple	-	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 Ind	ustry	Recognized Credentials: WorkKeys National Care	eer Readiness Certificate, Digital Media Production Ce	ertificate, Film & Video Certificate	
		Existing Today and Tomorrow: Video Scheduling al Broadcast Operations Manager	Specialist, Master Control Operator, TV Programming	g Director, Streaming Service Animation	

		Ar	<b>CTE Career Cluster</b> ts, A/V Technology, & Communications	5	
			CTE Career Pathway		
Dethu			3D Modeling and Animation (TDMA)		
Pathw Comple	-	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: Simulation & Game Development – CCP Pathway				
CTE Ind	ustry	Recognized Credentials: WorkKeys Natio	nal Career Readiness Certificate, Autodesk Certified U	ser 3DS Max, Autodesk Certified User Maya	
CTE Car	eers E	<b>Existing Today and Tomorrow:</b> Graphic D	esigner, Digital Art Director, Virtual Animation Archite	ct, Futuristic Design Coordinator	

			<b>CTE Career Pathway</b> Game Art Design (GAAR)	
Pathw Comple		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: <u>Simulation &amp; Game Development – CCP Pathway</u>			
CTF Ind	ustry	Recognized Credentials: WorkKeys Natio	nal Career Readiness Certificate, Online Game Desig	gn Certificate

		CTE Career Pathway			
		Business Ethics & Law (BSEL)			
thway npleter	CTE Course 1	CTE Course 2	CTE Career Pathway Major		
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		
	BF10 Business Essentials MM51 Marketing CC11 Microsoft Excel^				
Promise	Recommended Career & College Promise (CCP) Pathway: Business Administration - CCP Pathway				

			CTE Career Pathway	
			Entrepreneurship (ENTRE)	
Pathw Comple	-	CTE Course 1	CTE Course 2	CTE Career Pathway Major
UIE CONCENTRATOR	CTE Major	ME11 Entrepreneurship I	ME12 Entrepreneurship II*^	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
CTE Courses	BF10 Business Essentials MM51 Marketing CC11 Microsoft Excel <sup>^</sup>			
College Promise	Recommended Career & College Promise (CCP) Pathway: Business Administration - CCP Pathway			

	CTE Career Cluster Business Management and Administration						
			CTE Career Path				
			General Management	•			
Pathw Comple					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 - CCP Pathway						
CTE Ind	ustry	Recognized Credentials: WorkKe	eys National Career Readiness Certificate				
CTE Car	eers E	Existing Today and Tomorrow: A	account Manager, Business Consultant, Shar	eability Auditor, Global Business Na	vigator		

		Busin	ess Management and Administration	1
			CTE Career Pathway	
			Project Management (PMGT)	
Pathw Comple	-	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 - CCP Pathway			
CTE Ind	ustry	Recognized Credentials: WorkKeys National	Career Readiness Certificate, PMI Project Managen	nent Ready

			<b>CTE Career Cluster</b> Education and Training		
			<b>CTE Career Pathway</b> Teaching/Training (TETR)		
Pathw Comple		CTE Course 1	CTE Course 2	CTE Career Pathway Major	
CTE Concentrator	CTE Major	FE21 Teaching as a Profession IA	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: <u>College Transfer Pathway Leading to the Associate in Arts - Teacher Preparation</u> <u>College Transfer Pathway Leading to the Associate in Science- Teacher Preparation</u>				
CTE Ind	ustry	Recognized Credentials: WorkKeys National Ca	areer Readiness Certificate, Basic School Age Card	e (BSAC), Content Specific Educator's License	
CTE Car	eers l	xisting Today and Tomorrow: Teacher, Colleg	e Dean, Curriculum Developer, Superintendent, N	/irtual Learning Specialist, Avatar Instructor	

		CTE Career Cluster Finance				
CTE Career Pathway Accounting (ACCT)						
Pathway Completer		CTE Course 2	CTE Career Pathway Major			
CTE Maior	BA10 Accounting I	BA20 Accounting II*^	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship			
CTE Courses		CC11 Microsoft Excel <sup>A</sup> BF10 Business Essentials ME11 Entrepreneurship I				
College Promise	Recommended Career & College Promise (CCP) Pathway: <u>College Transfer Pathway Leading to the Associate in Arts Degree</u> <u>Accounting and Finance - CCP Pathway</u>					
TE Indust	try Recognized Credentials: WorkKey	s National Career Readiness Certificate, Intuit QuickBooks	Certified User			

			<b>CTE Career Clu</b> Finance	ster	
			CTE Career Pat	•	
			Financial Securities and Inv	estments (FNLP)	
Pathw Comple	•	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: <u>College Transfer Pathway Leading to the Associate in Arts Degree</u> <u>Accounting and Finance – CCP Pathway</u>				
CTE Ind	ustry	Recognized Credentials: WorkKey	s National Career Readiness Certificate		
			ancial Planner, Stockbroker, Crypto Cur	ency Banker, Currency Adoption Spec	cialist

	CTE Career Cluster Health Science						
			CTE Career Pathw Healthcare Professiona	•			
Pathw Comple	•	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: <u>College Transfer Pathway Leading to the Associate in Science Degree</u> <u>Associate Degree in Nursing, ADN Pathway</u>						
	-	Recognized Credentials: WorkKer Basic Life Support CPR, North Care	ys National Career Readiness Certificate, Sto Dlina Nurse Aide I	op the Bleed, First Aid, OSHA 10-Hou	ır General Industry (Healthcare)		
		Existing Today and Tomorrow: Re Designer, Organ Agent	gistered Nurse Aid, Healthcare Implementa	tion Consultant, Cradle to Grave Life	ecycle Manager, Genetic		

			<b>CTE Career Clus</b> Hospitality & Tou		
			CTE Career Path Culinary Arts Applicatio	•	
Pathw Comple		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 ME11 Entreprene		
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Culinary Arts Certificate				
Fundan Achieve	nental ( ement,	Cook, American Culinary Federation National Restaurant Association F	vs National Career Readiness Certificate, C on Culinary Arts Pre-PAC, American Associ Education Foundation linary Operations Director, Sous Chef, Cate	ation of Family & Consumer Scienc	es, ProStart Certificate of

	CTE Career Cluster Hospitality & Tourism							
	CTE Career Pathway Culinary Arts Internship (CULI)							
Pathw Comple	-	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 Microso ME11 Entrepre					
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: <u>Hospitality Management Non-Service Certificate - CCP</u>							
Fundam Achieve	nental ( ment,	Cook, American Culinary Federation National Restaurant Association E	s National Career Readiness Certificate on Culinary Arts Pre-PAC, American Ass ducation Foundation inary Specialist, Executive Chef, Cuisine	ociation of Family & Consumer Scien	nces, ProStart Certificate of			

			<b>CTE Career Cluster</b> Hospitality & Tourism		
			CTE Career Pathway Sport & Event Marketing (SEMK)		
Pathw Comple	-	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 Ind	ustry	Recognized Credentials: WorkKeys Nationa	Il Career Readiness Certificate		
CTE Car	eers l		Il Career Readiness Certificate	ecialist, Super Athlete Designer, Global	

			CTE Career Pathway	
			Travel & Tourism (TRTO)	
Pathw Comple	-			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			

CompleterCTE Course 9 de Grade or 10 de Grade or 11 de GradeCTE Course 10 Grade or 11 de Grade12th GradebreadbreadFC13 Counseling andFC14 Counseling andWork-Based Learning:				CTE Career Cluster	
Counseling and Mental Health (CMHC)     Pathway Completer   CTE Course 9th Grade or 10th Grade   CTE Course 10 Grade or 11th Grade   CTE Career Pathway Course 12th Grade     vog U   vog U   vog U   FC13 Counseling and Mental Health I   FC14 Counseling and Mental Health II*   Work-Based Learning: CTE Apprenticeship or CTE Intern     vog U   vog U   Vog U   FC13 Course Intern   HU40 Health Science I HU42 Health Science I HU42 Health Science II (The above supplemental courses should be taken in sequential order.)   HU40 Health in sequential order.)				Human Services	
Pathway Completer   CTE Course 9th Grade or 10th Grade   CTE Course 10 Grade or 11th Grade   CTE Career Pathway Course 12th Grade     bread U   bread U   FC13 Counseling and Mental Health I   FC14 Counseling and Mental Health II*   Work-Based Learning: CTE Apprenticeship or CTE Intern     reader U   reader U   HU40 Health Science I HU42 Health Science II (The above supplemental courses should be taken in sequential order.)   HU40 Health I sequential order.)				CTE Career Pathway	
Completer CTE Course 9 <sup>cc</sup> Grade or 10 <sup>cc</sup> Grade CTE Course 10 Grade or 11 <sup>cc</sup> Grade 12 <sup>th</sup> Grade   0 1 1 1 1 1   0 1 1 1 1 1   0 1 1 1 1 1   0 1 1 1 1 1   0 1 1 1 1 1   0 1 1 1 1 1   0 1 1 1 1 1   0 1 1 1 1 1   0 1 1 1 1 1   0 1 1 1 1 1   0 1 1 1 1 1   0 1 1 1 1 1   0 1 1 1 1 1   0 1 1 1 1 1   0 1 1 1 1 1   0 1 1 1 1 1   0 1 1 1 1 1			Coun	seling and Mental Health (CMHC)	
Image: State of the state o		-	CTE Course 9 <sup>th</sup> Grade or 10 <sup>th</sup> Grade	CTE Course 10 Grade or 11 <sup>th</sup> Grade	CTE Career Pathway Course 12 <sup>th</sup> Grade
	CTE Concentrator	CTE Major	_	-	Work-Based Learning: CTE Apprenticeship or CTE Internship
Recommended Career & College Promise (CCP) Pathway: <u>Human Services Technology – CCP Pathway</u>	Supplemental CTE Courses	HU42 Health Science II			
	Career & College Promise	Recommended Career & College Promise (CCP) Pathway: <u>Human Services Technology – CCP Pathway</u>			
CTE Industry Recognized Credentials: Pre-Professional Certification in Family and Community Services	CTE Ind	ustry	Recognized Credentials: Pre-Professional Cert	ification in Family and Community Services	

			CTE Career Cluster Human Services	
		Early (	<b>CTE Career Pathway</b> Childhood Development & Services (E	ACH)
Pathw Comple		CTE Course 1	CTE Course 2	CTE Career Pathway Major
trator .	or			FE12 Early Childhood Education II^ (2 credit course)
CTE Concentrator	CTE Major	FE60 Child Development	FE11 Early Childhood Education I*^ (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: <u>Early Childhood Education Certificate</u>			hway:
CTE Ind	ustry	Recognized Credentials: WorkKeys Natio	nal Career Readiness Certificate, CPR, First Aid, NC E	arly Childhood Credential Equivalency
		Existing Today and Tomorrow: Human Se a Contexualist, Precision Education Specia	· · ·	ant, Health & Human Services Professional, Deficiency

			Information Technology	
			CTE Career Pathway	
		(	Cisco Network Engineering (CNEN)	
Pathw Comple		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 – Computer Technology Integration - CCP			
	ustry		nation Technology – Computer Technology Integra	

			CTE Career Cluster Information Technolog	у	
			CTE Career Pathway		
			Computer Engineering (CC	DEN)	
Pathw Comple	•	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 IA	CIO2 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 Ind	ustry	Recognized Credentials: WorkKeys	National Career Readiness Certificate		
CTE Car	eers I	Existing Today and Tomorrow: Cybe	ersecurity Sales Engineer, Embedded Software	Application Engineer, Data Transr	nission Optimizer

			<b>CTE Career Cluster</b> Information Technology		
		(	CTE Career Pathway Computer Science Principles (CSPR)		
Pathw Comple	•	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: <u>College Transfer Pathway Leading to the Associate in Science Degree</u>				
CTE Ind	ustry	Recognized Credentials: WorkKeys Nation	al Career Readiness Certificate		
CTE Car	eers E	xisting Today and Tomorrow: Software De	eveloper, Intellectual Property Associate, Data Stream	Organizer	

			CTE Career Pathway	
			Python Programming (PYPR)	
Pathw Comple	•	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	CIOO CompTIA IT Fundamentals CC11 Microsoft Excel^ CP20 Develop in Swift Explorations			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: <u>College Transfer Pathway Leading to the Associate in Science Degree</u>			

	CTE Career Cluster Information Technology							
	CTE Career Pathway							
			Swift Development Career F	athway (SDCP)				
Pathw Comple			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 Compute Cl00 CompTIA IT Fur CC11 Microsoft ME11 Entreprene	idamentals Excel^				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree							
CTE Ind	ustry	Recognized Credentials: WorkKeys	National Career Readiness Certificate, A	pp Development with Swift Certifi	ed User			
		Existing Today and Tomorrow: Softwers, Avatar Designer	ware Analyst, Apple App Store Creator, A	utomation Engineer, Computer Po	ersonality Designers, Smart Contact			

			CTE Career Pathway		
			Emergency Management (E		
Pathw Comple	•	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 Educatior (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				
	ustry R	ecognized Credentials: WorkKeys	National Career Readiness Certificate, Nation	al Incident Management System, Law ar	d Public Safety Intro

		CTE Ca	areer Pathway		
		Emergency Med	lical Technology (EMMT)		
Pathw Comple	'	CTE Course 1	CTE Course 2	CTE Career Pathway Major	
CTE Concentrator	CTE Major	IP21 Emergency Medical Technology IA	IP22 Emergency Medical Technology II*^	Work-Based Learning: CTE Apprenticeship, Cooperative Educatior (Co-op), Clinical or CTE Internship	
Supplemental CTE Courses	HU40 Health Science I IP11 Public Safety I IP51 Emergency Management I				
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree				
CTE Ind		<u>College Transfer Pathw</u> ecognized Credentials: WorkKeys National Career Readines ystem, Stop the Bleed, Emergency Medical Technician (EMT	ss Certificate, BLS Provider, Emergency Medical Responde	er (EMR), National Incide	

			CTE Career	Pathway	
			Firefighter Tech	•	
Pathwa Complet		CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major
CIE 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
ouppiementai 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: <u>Fire Protection Technology Pathway - CCP</u>				

			CTE Career Pathway		
			Law and Justice (LAWJ)		
Pathw Comple	-	CTE Course 1	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: Criminal Justice Technology Pathway - CCP				

			CTE Career Pathway Public Safety (PSPW)		
Pathw Comple	-	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 Pathway - CCP				
	-		eer Readiness Certificate, Law and Public Safety (CERT), National Basic 9-1-1 Dispatch Certificati		

Y man	<b>CTE Career</b> Electronic	•		
N				
er CTE Course 1	CTE Course 2	CTE Course 3	CTE Career Pathway Major	
IK88 Electronics I	IK89 Electronics II*	IK90 Electronics III	Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship	
CC11 Microsoft Excel^ BF10 Business Essentials CS20 Computer Science I				
Recommended Career & College Promise (CCP) Pathway: Electronics Engineering Technology - Basic Electronics Certificate				
CTE Major	IK88 Electronics I	CC11 M BF10 Bus CS20 Con Recommended Career &	CC11 Microsoft Excel^ BF10 Business Essentials CS20 Computer Science I Recommended Career & College Promise (CCP) Pathway:	

			CTE Career Pathway		
		Me	tals Manufacturing (MEMA)		
Pathw Comple	-	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: <u>Manufacturing Technology Apprenticeship Certificate</u> <u>Welding Technology - GMAW Fabrication Certificate</u>				

			CTE Career Cluster Manufacturing		
			CTE Career Pathway		
			Woodworking (WOWO)		
Pathway Complete	-	CTE Course 1	CTE Course 2	CTE Career Pathway Major	
LIE 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				
		gnized Credentials: WorkKeys National Car vblade Certificate	reer Readiness Certificate, OSHA 10-hour Constru	ction Safety and Health, Woodwork Career	

			CTE Career Cluster Marketing		
		Ma	<b>CTE Career Pathway</b> arketing Management (MMGT)		
Pathw Comple	-	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: <u>College Transfer Pathway Leading to the Associate in Arts Degree</u>				
CTE Ind	ustry	Recognized Credentials: WorkKeys National Ca	reer Readiness Certificate, CIW Social Media	Strategist, Business of Retail Certified Specialist	
		<b>xisting Today and Tomorrow:</b> Inbound Market ner Consultant	ing Specialist, Email Marketing Manager, Bra	nding Specialist, Social Media Advertising Supervisor,	

	CTE Career Cluster Marketing							
CTE Career Pathway Sales (PRSM)								
Pathw Comple				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 - CCP Pathway							
CTE Ind	ustry Reco	ognized Credentials: WorkKeys Nation	al Career Readiness Certificate					
TE Car	eers Existi	ng Today and Tomorrow: Remote Sal	es Manager, Technical Sales Coordinator, Virtua	al Product Sales Advisor				

CTE Career Pathway Drafting Engineering (DREN)						
Pathway Completer	CTE Course 1	CTE Course 2	CTE Career Pathway Major			
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			
CTE Courses	CC11 Microsoft Excel^ ME11 Entrepreneurship I					
College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree					
ع معنود و Ollege TE Industry Recog	gnized Credentials: WorkKeys Nat	<b>e</b> , , ,	nce Degree Jser AutoCAD, Autodesl			

		S	<b>CTE Career Clus</b> cience, Technology, Engineeri			
		50	CTE Career Path	•		
			Engineering Technolog	•		
Pathw Comple						
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 <sup>^</sup>					
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Arts Degree					
CTE Ind	ustry	Recognized Credentials: WorkKeys	National Career Readiness Certificate			
CTE Car	eers I	Existing Today and Tomorrow: Me	chanical Engineer, Industrial Engineer, Av	vionics Engineer, Heavy Air Engineers	, Construction Material Designers	

				reer Cluster Distribution & Logistics	
			CTE Car	eer Pathway Services (AUTO)	
Pathw Comple	•	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: <u>Automotive Systems Technology - Brakes Certificate</u>				
Automo Certific	otive S ation-	Service Pollution Prevention, S Brakes; ASE Auto Maintenanc	/P2 Automotive Service Safety, AS e and Light Repair Certification (G	-	· · · · · · · · · · · · · · · · · · ·

CTE Career Pathway Major				
CTE Career Pathway Major				
Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op) Clinical or CTE Internship				
IT11 Automotive Service Fundamentals IC61 Drafting I^ ID10 Drone Technology Fundamentals CS20 Computer Science I				
Recommended Career & College Promise (CCP) Pathway: <u>Aerospace Manufacturing Technology - Aircraft Structures Assembly &amp; Repair Diploma</u> <u>Aviation Management and Career Pilot Technology Diploma</u> <u>Aviation Systems Technology, General Certificate</u> <u>Aviation Systems Technology – CCP Pathway</u> Aerospace Manufacturing Technology – Operations Management & Lean Sigma Certificate				

			<b>CTE Career Pathv</b> Collision Repair (C	•	
Pathw Comple	-	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 Educatior (Co-op), Clinical or CTE Internship
Supplemental CTE Courses			CC11 Microsoft F ME11 Entreprene CS20 Computer So	urship I	
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: <u>Collision Repair &amp; Refinishing Technology Certificate</u>				
Repair	and R			P2 Collision Repair and Refinish - Pollution Pre Level I – Non-Structural, ASE Entry Level Paint	

	CTE Career Cluster Transportation, Distribution & Logistics						
			CTE Career Pa	thway			
Pathw	ay	CTE Course 1	Diesel Technolog CTE Course 2	gy (DISL) CTE Course 3	CTE Corpor Dathway Major		
Comple	ter	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 Busines CC11 Micros ME11 Entrepr CS20 Comput	oft Excel^ eneurship I			
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Diesel & Heavy Equipment Technology Engine Certificate						
	-	<b>Recognized Credentials:</b> WorkKe uck (T1-T8)	eys National Career Readiness Certificate	e, ASE Technician Certification in Ti	ruck Equipment (E1-E3) and Medium		
TE Car	<b>TE Careers Existing Today and Tomorrow:</b> Diesel Technician, Heavy Equipment Operator, Paving/Surface Equipment Operators, Self-Driving Truck Mechanic						

## 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					
		PLTW B	CTE Career Pathwa otechnology Research and D	•		
Pathw Comple	•	CTE Courses 9 <sup>th</sup> Grade	CTE Course 10 <sup>th</sup> Grade	CTE Course 11 <sup>th</sup> Grade	CTE Career Pathway Course 12 <sup>th</sup> Grade	
CTE Concentrator	CTE Major	HP70 PLTW Principles of Biomedical Sciences <sup>^</sup>	HP71 PLTW Human Body Systems <sup>^</sup>	HP72 PLTW Medical Interventions*^	HP73 PLTW Biomedical Innovations^ Work-Based Learning: CTE Apprenticeship or CTE Internship	
Supplemental CTE Courses			HU40 Health Scien HU42 Health Scien (The above supplemental courses should be f	ce ll		
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: College Transfer Pathway Leading to the Associate in Science Degree					
CTE Ind	CTE Industry Recognized Credentials: CPR/AED; First Aid; Stop the Bleed; OSHA 10-Hour General Industry (Healthcare) Certification					
CTE Ca	CTE Careers Existing Today and Tomorrow: Genetics Expert, Super Baby Designer, Body Modification Ethicist, Clone Rancher, Lip Designer					

\*Denotes CTE Concentrator Course

## **Signature Career Academy of Biomedical Technology and Specialized Health Sciences** Location: The Academy at Smith

	CTE Career Cluster Health Science					
			<b>CTE Career Patl</b> Pharmacy Technicia	=	D MEATIN SAL	
Pathw Comple	•	CTE Course 9 <sup>th</sup> Grade	CTE Course 10 <sup>th</sup> Grade	CTE Course 11 <sup>th</sup> Grade	CTE Career Pathway Course 12th Grade	
CTE Concentrator	CTE Major	HU40 Health Science I	HU42 Health Science II*	HL17 Pharmacology Fundamentals I	HH32 Pharmacy Technician^ Work-Based Learning: CTE Apprenticeship or CTE Internship	
Supplemental CTE Courses			HP70 PLTW Principles of E HP71 PLTW Human HP72 PLTW Medical (The above supplemental courses shoul	Body Systems Interventions		
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: <u>College Transfer Pathway Leading to the Associate in Science Degree</u> <u>Pharmacy Technology – CCP Pathway</u>					
	<b>CTE Industry Recognized Credentials:</b> Stop the Bleed; CPR/AED; First Aid; OSHA 10-Hr. General Industry (Healthcare) Certification; North Carolina Nurse Aide I; Cpht Certified Pharmacy Technician					
	CTE Careers Existing Today and Tomorrow: Registered Nurse Aid; Pharmacy Technician, Healthcare Implementation Consultant, Cradle to Grave Lifecycle Manager, Genetic Modification Designer, Organ Agent					

## \*Denotes CTE Concentrator Course

## **Signature Career Academy of Biomedical Technology and Specialized Health Sciences** Location: The Academy at Smith

			CTE Career Cluster Human Services	TO BOOTS AT ANY	
		Coun	CTE Career Pathway seling and Mental Health (CMHC)	D MENTER AND	
Pathw Comple	-	CTE Course 9 <sup>th</sup> Grade or 10 <sup>th</sup> Grade	CTE Course 10 Grade or 11 <sup>th</sup> Grade	CTE Career Pathway Course 12 <sup>th</sup> 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: <u>College Transfer Pathway Leading to the Associate in Arts Degree</u> <u>Human Services Technology – CCP Pathway</u>				
CTE Ind	ustry F	Recognized Credentials: Pre-Professional Certi	fication in Family and Community Services		
CTE Car	eers E	xisting Today and Tomorrow: Behavioral Healt	h Specialist, Outpatient Therapist, Psychologist, So	ociologist, Quantified Self-Assessment Auditor	

\*Denotes CTE Concentrator Course

Signature Career Academy of Computer and Information Science

Location: Kearns Academy

			CTE Career Clus Information Tech		A CONTRACTOR			
	CTE Career Pathway Cybersecurity (CBSY)							
Pathw Comple	-	CTE Course 9 <sup>th</sup> Grade	CTE Course 10 <sup>th</sup> Grade	CTE Course 11 <sup>th</sup> Grade	CTE Career Pathway Course 12 <sup>th</sup> 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 0A02 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: <u>Cyber Crime and Digital Forensics Pathway - CCP</u>							
CTE Ind	CTE Industry Recognized Credentials: CompTIA Security+							
	CTE Careers Existing Today and Tomorrow: Cybersecurity Sales Engineer, Embedded Software Application Engineer, Information Technology Specialist, Cloud Security Operations Engineer							

## \*Denotes CTE Concentrator Course

Location: Kearns Academy

			CTE Career Clu Information Tech		A COMPACT AND A			
	CTE Career Pathway Artificial Intelligence (AI)							
Pathw Comple	-	CTE Course 9 <sup>th</sup> Grade	CTE Course 10 <sup>th</sup> Grade	CTE Course 11 <sup>th</sup> Grade	CTE Career Pathway Course 12 <sup>th</sup> 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 Cl00 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							
	<b>CTE Industry Recognized Credentials:</b> Information Technology Specialist: Python, PCEP - Certified Entry-level Python Programmer, PCAP Certified Associate in Python Programming; SAS Certified Specialist Programming Fundamentals Using SAS 9.4							
	<b>CTE Careers Existing Today and Tomorrow:</b> Software Developer, Intellectual Property Associate, Application Development Leader, Machine Learning Engineer, Robotic Earthworm Drivers							

### \*Denotes CTE Concentrator Course

			CTE Career Clust Information Techno		AND TO COMPANY OF THE PARTY OF	
			<b>CTE Career Pathw</b> Cybersecurity (CB	•	Records of the second s	
Pathw Comple	-	CTE Course 9 <sup>th</sup> Grade	CTE Course 10 <sup>th</sup> Grade	CTE Course 11 <sup>th</sup> Grade	CTE Career Pathway Course 12 <sup>th</sup> 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 P 0A02 AP Computer Scien Cl00 CompTIA IT Fund (The above supplemental courses should be	ce Principles lamentals		
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: <u>Cyber Crime and Digital Forensics Pathway - CCP</u>					
CTE Ind	lustry	Recognized Credentials: CompTIA Se	ecurity+			
	TE Careers Existing Today and Tomorrow: Cybersecurity Sales Engineer, Embedded Software Application Engineer, Intellectual Property Associate, Data tream Organizer					

			CTE Career Clus Information Techr		State Contraction	
			CTE Career Path Artificial Intelligen	•	R ANTON SULFAR	
Pathw Comple	-	CTE Course 9 <sup>th</sup> Grade	CTE Course 10 <sup>th</sup> Grade	CTE Course 11 <sup>th</sup> Grade	CTE Career Pathway Course 12 <sup>th</sup> 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 0A02 AP Computer Science Cl00 CompTIA IT Fu CP10 Python Prog (The above supplemental courses should	ence Principles ndamentals ramming I		
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: <u>College Transfer Pathway Leading to the Associate in Science Degree</u>					
CTE Ind	CTE Industry Recognized Credentials: App Development with Swift Associate, App Development with Swift Certified User					
	TE Careers Existing Today and Tomorrow: Software Developer, Intellectual Property Associate, Analytics Expert, Sustainability Integration Expert, Robotic Carthworm Drivers					

Location: Ben L. Smith HS

			CTE Caree Science, Technology, Eng CTE Career PLTW Engined	ineering & Mathematics Pathway	
Pathw Comple	-	CTE Course 9 <sup>th</sup> Grade	CTE Course 10 <sup>th</sup> Grade	CTE Course 11 <sup>th</sup> Grade	CTE Career Pathway Course 12 <sup>th</sup> 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			ME11 En BF10 Bu	licrosoft Excel^ trepreneurship I siness Essentials nputer Science I	
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: <u>Computer Integrated Machining - CCP Pathway</u>				
	-		10-Hour Industry Certification (optio		
CTE Car Storage			Mechanical Engineer, CAD Designer,	Product Developer; Systems Transiti	onists, Efficiency Optimizer, Mass Energy

\*Denotes CTE Concentrator Course

Location: Ben L. Smith HS

			CTE Career Cluster Manufacturing		
		Adva	CTE Career Pathway anced Manufacturing (ADMA)	Wite States Market	
Pathw Comple	-	CTE Course 1	CTE Course 2	CTE Career Pathway Major Course	
CTE Concentrator	CTE Major	IM11 Advanced Manufacturing IA	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 <sup>A</sup> ME11 Entrepreneurship I BF10 Business Essentials CS20 Computer Science I		
Career & College Promise	Recommended Career & College Promise (CCP) Pathway: Mechatronics Engineering Technology - CCP Pathway				
Produc Quality	tion Te Practi	Recognized Credentials: OSHA 10-Hour Industry echnician (CPT) – Safety, Certified Production Tecl ces and Measurement Existing Today and Tomorrow: Electrical Enginee	hnician (CPT) - Manufacturing Processes and Pro	oduction, Certified Production Technician (CPT) -	

## \*Denotes CTE Concentrator Course

Location: Western Guilford HS

CTE Career Cluster Transportation, Distribution & Logistics										
CTE Career Pathway										
Drone Technology (DRON)										
Pathway Completer		CTE Course 9 <sup>th</sup> Grade	CTE Course 10 <sup>th</sup> Grade	CTE Course 11 <sup>th</sup> Grade	CTE Career Pathway Course 12 <sup>th</sup> Grade					
CTE Concentrator	CTE Major	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: FAA Trust, CFR (FAA) 14 Part 107 UAS Remote Pilot Certification, ESRI Drone2Map, NFPA 2400										
CTE Careers Existing Today and Tomorrow: Drone Engineer, Drone Docking Designer, Operator Certification Specialist, Drone Traffic Optimizer										

## \*Denotes CTE Concentrator Course

Location: Western Guilford HS

			CTE Career		STATUS MICH School				
Transportation, Distribution & Logistics									
CTE Career Pathway Global Logistics & Supply Chain Management (GLSC)									
Pathw Comple	•	CTE Course 9 <sup>th</sup> Grade	CTE Course 10 <sup>th</sup> Grade	CTE Course 11 <sup>th</sup> 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 <sup>A</sup> 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 – CCP Pathway								
<b>CTE Industry Recognized Credentials:</b> OSHA 10 – General Industry Certification, Certified Technician-Supply Chain Automation (CTSCA): CTSCA-EM Equipment Maintenance, CTSCA-ER Equipment Repair, CTSCA-NR Network Repair									
<b>CTE Careers Existing Today and Tomorrow:</b> Trade Compliance Supervisor, Logistics Engineer, Supply Chain Manager, Transportation Manager, Automated Traffic Architect, Driverless Operating System Engineer									

\*Denotes CTE Concentrator Course



## **CAREER AND TECHNICAL EDUCATION**



# **#CTETAKESFLIGHT**

Career & Technical Education (CTE) in Guilford County Public Schools offers a comprehensive Career and Technical Education program for students in middle and high schools. Guilford County Public Schools does not discriminate based on race, color, national origin, sex (including parental and marital status), disability, or age in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. This notice is provided by the Title VI of the Civil Rights Act of 1965, Section 504 of the rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, the Age of Discrimination Act of 1975, and the American Disability Act of 1990. Direct inquiries or complaints regarding Title IX should be sent to the Guilford County Schools' Compliance Officer at 336-370-8154. Direct inquiries or complaints regarding Section 504 should be sent to the Director of Exceptional Children at 336-370-8154.