

ISP

ARTIFICIAL INTELLIGENCE & CYBER SECURITY PATHWAYS

CTE Advocacy. Increased Funding. Redesign. Partnerships.

Software Developers

Jobs projected to grow

+22%

between 2019-2020
*FASTEST on average
for all occupations*

Source: U.S. Labor Bureau of Statistics

Women in Tech

North Carolina ranks

#1 STATE

Source: The Economic Development Partnership of North Carolina

Cybersecurity

3.5 million

jobs globally by 2021
(up from 1 million in 2014)

Source: New York Times, 2019



CTE CAREER PATHWAY Artificial Intelligence (AI)				
	9th Grade	10th Grade	11th Grade	12th Grade
PATHWAY COMPLETER	CTE Course	CTE Course	CTE Course	CTE Career Course
CTE CONCENTRATOR	CC11 Microsoft Excel	CP10 Python Programming I or BM21 Introduction to Data Science	CP11 Python Programming II* or BP20 SAS Base Programming*	CA10 Artificial Intelligence I Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
CTE MAJOR				
SUPPLEMENTAL CTE COURSES	CS20 Computer Science I or 0A02 AP Computer Science Principles			
CAREER & COLLEGE PROMISE	Recommended Career & College Promise (CCP) Pathway: <u>College Transfer Pathway Leading to the Associate in Science Degree</u>			
CTE Industry Recognized Credentials: Microsoft Office Specialist Excel Expert; PCAP Certified Associate in Python Programming; SAS Certified Specialist Programming Fundamentals Using SAS 9.4				
CTE Careers Existing Today and Tomorrow: Software Developer, Intellectual Property Associate, Application Development Leader, Machine Learning Engineer, Robotic Earthworm Drivers				

CTE CAREER PATHWAY Cybersecurity (CBSY)				
	9th Grade	10th Grade	11th Grade	12th Grade
PATHWAY COMPLETER	CTE Course	CTE Course	CTE Course	CTE Career Course
CTE CONCENTRATOR	CI35 PLTW Cybersecurity	BN20 Network Administration I	BN22 Network Administration II* and CI30 Cybersecurity I	CI31 Cybersecurity II* Work-Based Learning: CTE Apprenticeship, Cooperative Education (Co-op), Clinical or CTE Internship
CTE MAJOR				
SUPPLEMENTAL CTE COURSES	CS20 Computer Science I or 0A02 AP Computer Science Principles			
CAREER & COLLEGE PROMISE	Recommended Career & College Promise (CCP) Pathway: <u>Cyber Crime and Digital Forensics Certificate</u>			
CTE Industry Recognized Credentials: CompTIA Network+; CompTIA Security+				
CTE Careers Existing Today and Tomorrow: Cybersecurity Sales Engineer, Embedded Software Application Engineer, Intellectual Property Associate, Data Stream Organizer				

CTE...the Ultimate Classroom to Career Experience!

*Denotes CTE Concentrator Course